Index to "Imperial Trade Guide"

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THE

INDIAN YEAR BOOK

1929.

A STATISTICAL AND HISTORICAL ANNUAL OF THE INDIAN EMPIRE, WITH AN EXPLANATION OF THE PRINCIPAL TOPICS OF THE DAY.

EDITED BY

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AND

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CALENDAR FOR 1929.

January.						
S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	31	...
F.	4	11	18	25	...	
S.	5	12	19	26	...	...

February.						
S.	...	3	10	17	24	...
M.	...	4	11	18	25	...
Tu.	..	5	12	19	26	...
W.	...	6	13	20	27	...
Th.	...	7	14	21	28	...
F.	1	8	15	22	...	...
S.	2	9	16	23	...	..

March.						
S.	...	3	10	17	24	31
M.	...	4	11	18	25	...
Tu.	...	5	12	19	26	...
W.	...	6	13	20	27	...
Th.	...	7	14	21	28	...
F.	1	8	15	22	29	...
S.	2	9	16	23	30	...

April.						
S.	...	7	14	21	28	...
M.	1	8	15	22	29	...
Tu.	2	9	16	23	30	...
W.	3	10	17	24	...	...
Th.	4	11	18	25	...	...
F.	5	12	19	26	...	...
S.	6	13	20	27		...

May.						
S.	...	5	12	19	26	...
M.	...	6	13	20	27	...
Tu.	...	7	14	21	28	...
W.	1	8	15	22	29	...
Th.	2	9	16	23	30	...
F.	3	10	17	24	31	...
S.	4	11	18	25	...	...

June.						
S.	..	2	9	16	23	30
M.	...	3	10	17	24	...
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	...	6	13	20	27	...
F.	...	7	14	21	28	...
S.	1	8	15	22	29	...

July.						
S.	...	7	14	21	28	...
M.	1	8	15	22	29	...
Tu.	2	9	16	23	30	...
W.	3	10	17	24	31	...
Th.	4	11	18	25	...	...
F.	5	12	19	26	...	...
S.	6	13	20	27		..

August.						
S.	...	4	11	18	25	...
M.	...	5	12	19	26	...
Tu.	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th.	1	8	15	22	29	...
F.	2	9	16	23	30	...
S.	3	10	17	24	31	...

September.						
S.	1	8	15	22	29	...
M.	2	9	16	23	30	...
Tu.	3	10	17	24	...	...
W.	4	11	18	25	...	...
Th.	5	12	19	26	...	...
F.	6	13	20	27	...	...
S.	7	14	21	28	...	...

October.						
S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	31	...
F.	4	11	18	25	...	...
S.	5	12	19	26	...	...

November.						
S.	...	3	10	17	24	...
M.	...	4	11	18	25	...
Tu.	...	5	12	19	26	...
W.	...	6	13	20	27	...
Th.	...	7	14	21	28	...
F.	1	8	15	22	29	...
S.	2	9	16	23	30	...

December.						
S.	1	8	15	22	29	...
M.	2	9	16	23	30	...
Tu.	3	10	17	24	31	...
W.	4	11	18	25	...	...
Th.	5	12	19	26	...	...
F.	6	13	20	27	...	...
S.	7	14	21	28	...	...

Phases of the Moon—JANUARY 31 Days.

☾ Last Quarter......2rd, 0h. 14·4m. A.M. | ☽ First Quarter...18th, 8h. 45·1m. P.M.

● New Moon........11th, 5h. 58·2m. A.M. | ○ Full Moon........25th, 0h. 39·1m. P.M.

Day of the Week.		Day of the Month.	Day of the Year.	Indian Standard Time. Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
				H.	M.	H.	M.	H.	M.	D.	°	'
Tuesday	..	1	1	7	12	6	12	0	42	20·09	23	2
Wednesday	..	2	2	7	12	6	13	0	42	21·09	22	57
Thursday	..	3	3	7	13	6	13	0	43	22·09	22	52
Friday	..	4	4	7	13	6	14	0	43	23·09	22	46
Saturday	..	5	5	7	13	6	15	0	44	24·09	22	40
Sunday	..	6	6	7	13	6	15	0	44	25·09	22	33
Monday	..	7	7	7	14	6	16	0	45	26·09	22	26
Tuesday	..	8	8	7	14	6	17	0	45	27·09	22	18
Wednesday	..	9	9	7	14	6	17	0	46	28·09	22	10
Thursday	..	10	10	7	14	6	18	0	46	29·09	22	1
Friday	..	11	11	7	14	6	18	0	46	0·28	21	52
Saturday	..	12	12	7	15	6	19	0	46	1·28	21	43
Sunday	..	13	13	7	15	6	20	0	47	2·28	21	33
Monday	..	14	14	7	15	6	21	0	47	3·28	22	23
Tuesday	..	15	15	7	15	6	22	0	48	4·28	21	12
Wednesday	..	16	16	7	15	6	22	0	48	5·28	21	1
Thursday	..	17	17	7	15	6	23	0	48	6·28	20	49
Friday	..	18	18	7	15	6	24	0	49	7·28	20	37
Saturday	..	19	19	7	15	6	25	0	49	8·28	20	25
Sunday	..	20	20	7	15	6	25	0	49	9·28	20	13
Monday	..	21	21	7	15	6	26	0	50	10·28	19	59
Tuesday	..	22	22	7	15	6	27	0	50	11·28	19	46
Wednesday	..	23	23	7	15	6	27	0	50	12·28	19	32
Thursday	..	24	24	7	15	6	28	0	50	13·28	19	18
Friday	..	25	25	7	15	6	29	0	51	14·28	19	4
Saturday	..	26	26	7	15	6	29	0	51	15·28	18	49
Sunday	..	27	27	7	14	6	29	0	51	16·28	18	34
Monday	..	28	28	7	14	6	30	0	51	17·28	18	18
Tuesday	..	29	29	7	14	6	30	0	52	18·28	18	2
Wednesday	..	30	30	7	14	6	31	0	52	19·28	17	46
Thursday	..	31	31	7	14	6	31	0	52	20·28	17	30

Phases of the Moon—FEBRUARY 28 Days.

☾ Last Quarter....1st, 7h. 40·4m. P.M. | ☽ First Quarter ..17th, 5h. 52·5m. A.M.

● New Moon ....9th, 11h. 25·1m. P.M. | ○ Full Moon ......24th, 0h. 28·6m. A.M.

Day of the Week.		Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's Age at Noon.	Sun's Declination at Mean Noon.	
				Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
				H.	M.	H.	M.	H.	M.	D.	S.	
Friday	..	1	32	7	13	6	31	0	52	21·28	17	13
Saturday	..	2	33	7	13	6	32	0	53	22·28	16	56
Sunday	..	3	34	7	13	6	32	0	53	23·28	16	38
Monday	..	4	35	7	12	6	33	0	53	24·28	16	21
Tuesday	..	5	36	7	12	6	34	0	53	25·28	16	3
Wednesday	..	6	37	7	12	6	34	0	53	26·28	15	44
Thursday	..	7	38	7	11	6	35	0	53	27·28	15	26
Friday	..	8	39	7	11	6	35	0	53	28·28	15	7
Saturday	..	9	40	7	10	6	36	0	53	29·28	14	48
Sunday	..	10	41	7	10	6	36	0	53	0·55	14	29
Monday	..	11	42	7	10	6	37	0	53	1·55	14	9
Tuesday	..	12	43	7	9	6	37	0	53	2·55	13	49
Wednesday	..	13	44	7	9	6	38	0	53	3·55	13	29
Thursday	..	14	45	7	8	6	38	0	53	4·55	13	9
Friday	..	15	46	7	7	6	39	0	53	5·55	12	49
Saturday	..	16	47	7	7	6	39	0	53	6·55	12	28
Sunday	..	17	48	7	6	6	40	0	53	7·55	12	7
Monday	..	18	49	7	5	6	40	0	53	8·55	11	46
Tuesday	..	19	50	7	5	6	40	0	53	9·55	11	25
Wednesday	..	20	51	7	4	6	41	0	53	10·55	11	4
Thursday	..	21	52	7	4	6	41	0	53	11·55	10	42
Friday	..	22	53	7	3	6	41	0	53	12·55	10	20
Saturday	..	23	54	7	2	6	42	0	52	13·55	9	58
Sunday	..	24	55	7	2	6	42	0	52	14·55	9	36
Monday	..	25	56	7	1	6	42	0	52	15·55	9	14
Tuesday	..	26	57	7	1	6	43	0	51	16·55	8	52
Wednesday	..	27	58	7	0	6	43	0	51	17·55	8	30
Thursday	..	28	59	7	0	6	43	0	51	18·55	8	7

Phases of the Moon—MARCH 31 Days.

☾ Last Quarter ....3rd, 4h. 39·1m. P.M. | ☽ First Quarter ....18th, 1h. 11·5m. P.M.

● New Moon ......11th, 2h. 6·6m. P.M. | ○ Full Moon........25th, 1h. 16·3m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time. Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H.	M.	H.	M.	D.	S.	
Friday ..	1	60	6	59	6	44	0	51	19·55	7	44
Saturday ..	2	61	6	58	6	45	0	51	20·55	7	21
Sunday ..	3	62	6	57	6	45	0	51	21·55	6	59
Monday ..	4	63	6	56	6	45	0	51	22·55	6	36
Tuesday ..	5	64	6	56	6	46	0	51	23·55	6	12
Wednesday ..	6	65	6	55	6	46	0	50	24·55	5	49
Thursday ..	7	66	6	54	6	47	0	50	25·55	5	26
Friday ..	8	67	6	53	6	47	0	50	26·55	5	3
Saturday ..	9	68	6	53	6	47	0	50	27·55	4	39
Sunday ..	10	69	6	52	6	48	0	49	28·55	4	16
Monday ..	11	70	6	51	6	48	0	49	29·55	3	52
Tuesday ..	12	71	6	50	6	48	0	49	0·94	3	29
Wednesday ..	13	72	6	49	6	48	0	49	1·94	3	5
Thursday ..	14	73	6	49	6	49	0	48	2·94	2	41
Friday ..	15	74	6	48	6	49	0	48	3·94	2	18
Saturday ..	16	75	6	47	6	49	0	48	4·94	1	54
Sunday ..	17	76	6	46	6	49	0	48	5·94	1	30
Monday ..	18	77	6	45	6	49	0	48	6·94	1	7
Tuesday ..	19	78	6	44	6	50	0	47	7·94	0	43
Wednesday ..	20	79	6	43	6	50	0	47	8·94	0	19
Thursday ..	21	80	6	42	6	50	0	47	9·94	S. 0	4
Friday ..	22	81	6	41	6	50	0	46	10·94	N. 0	28
Saturday ..	23	82	6	40	6	51	0	46	11·94	0	52
Sunday ..	24	83	6	39	6	51	0	46	12·94	1	15
Monday ..	25	84	6	39	6	51	0	45	13·94	1	39
Tuesday ..	26	85	6	39	6	51	0	45	14·94	2	3
Wednesday ..	27	86	6	38	6	51	0	45	15·94	2	26
Thursday ..	23	87	6	37	6	52	0	45	16·94	2	50
Friday ..	29	88	6	36	6	52	0	44	17·94	3	13
Saturday ..	30	89	6	35	6	52	0	44	18·94	3	36
Sunday ..	31	90	6	34	6	52	0	44	19·94	4	0

Phases of the Moon—APRIL 30 Days.

☾ Last Quarter .... 2nd, 0h. 59·0m. P.M. | ☽ First Quarter ....16th, 7h. 39·2m. P.M.

● New Moon ....10th, 2h. 2·6m. A.M. | ○ Full Moon........24th, 3h. 17·4m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's Age at Noon.	Son's Declination at Mean Noon.	
			Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
			H.	M.	H.	M.	H.	M.	D.	N. °	′
Monday ..	1	91	6	33	6	53	0	43	20·94	4	23
Tuesday ..	2	92	6	33	6	53	0	43	21·94	4	46
Wednesday ..	3	93	6	32	6	53	0	42	22·94	5	9
Thursday ..	4	94	6	31	6	53	0	42	23·94	5	32
Friday ..	5	95	6	30	6	54	0	42	24·94	5	55
Saturday ..	6	96	6	29	6	54	0	42	25·94	6	18
Sunday ..	7	97	6	28	6	54	0	41	26·94	6	40
Monday ..	8	98	6	28	6	54	0	41	27·94	7	3
Tuesday ..	9	99	6	27	6	54	0	41	28·94	7	25
Wednesday ..	10	100	6	26	6	55	0	40	0·44	7	48
Thursday ..	11	101	6	25	6	55	0	40	1·44	8	10
Friday ..	12	102	6	24	6	55	0	40	2·44	8	32
Saturday ..	13	103	6	24	6	56	0	40	3·44	8	54
Sunday ..	14	104	6	23	6	56	0	39	4·44	9	16
Monday ..	15	105	6	22	6	56	0	39	5·44	9	37
Tuesday ..	16	106	6	21	6	56	0	39	6·44	9	59
Wednesday ..	17	107	6	21	6	57	0	38	7·44	10	20
Thursday ..	18	108	6	20	6	57	0	38	8·44	10	41
Friday ..	19	109	6	19	6	57	0	38	9·44	11	2
Saturday ..	20	110	6	19	6	57	0	38	10·44	11	23
Sunday ..	21	111	6	18	6	57	0	38	11·44	11	43
Monday ..	22	112	6	17	6	58	0	37	12·44	12	3
Tuesday ..	23	113	6	16	6	58	0	37	13·44	12	24
Wednesday ..	24	114	6	15	6	58	0	37	14·44	12	44
Thursday ..	25	115	6	14	6	59	0	37	15·44	13	3
Friday ..	26	116	6	14	6	59	0	37	16·44	13	23
Saturday ..	27	117	6	13	6	59	0	36	17·44	13	42
Sunday ..	28	118	6	13	7	0	0	36	18·44	14	1
Monday ..	29	119	6	13	7	0	0	36	19·44	14	20
Tuesday ..	30	120	6	12	7	0	0	36	20·44	14	39

Phases of the Moon—MAY 31 Days.

☾ Last Quarter .... 2nd, 6h. 55·5m. A.M.

● New Moon...... 9th, 11h. 37·3m. A.M.

☽ First Quarter .... 16th, 2h. 26·0m. A.M.

○ Full Moon ...... 23rd, 6h. 19·9m. P.M.

(Last Quarter...... 31st, 9h. 43·0m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
			H.	M.	H.	M.	H.	M.	D.	N. °	′
Wednesday ..	1	121	6	11	7	1	0	36	21·44	14	57
Thursday ..	2	122	6	11	7	1	0	36	22·44	15	15
Friday ..	3	123	6	10	7	1	0	36	23·44	15	33
Saturday ..	4	124	6	10	7	2	0	35	24·44	15	51
Sunday ..	5	125	6	9	7	2	0	35	25·44	16	8
Monday ..	6	126	6	9	7	2	0	35	26·44	16	25
Tuesday ..	7	127	6	8	7	3	0	35	27·44	16	42
Wednesday ..	8	128	6	8	7	3	0	35	28·44	16	59
Thursday ..	9	129	6	7	7	3	0	35	29·44	17	15
Friday ..	10	130	6	7	7	4	0	35	1·04	17	31
Saturday ..	11	131	6	6	7	4	0	35	2·04	17	46
Sunday ..	12	132	6	6	7	4	0	35	3·04	18	2
Monday ..	13	133	6	5	7	5	0	35	4·04	18	17
Tuesday ..	14	134	6	5	7	5	0	35	5·04	18	32
Wednesday ..	15	135	6	5	7	6	0	35	6·04	18	46
Thursday ..	16	136	6	4	7	6	0	35	7·04	19	0
Friday ..	17	137	6	4	7	6	0	35	8·04	19	14
Saturday ..	18	138	6	4	7	7	0	35	9·04	19	28
Sunday ..	19	139	6	3	7	7	0	35	10·04	19	41
Monday ..	20	140	6	3	7	7	0	35	11·04	19	54
Tuesday ..	21	141	6	3	7	8	0	35	12·04	20	6
Wednesday ..	22	142	6	2	7	8	0	35	13·04	20	18
Thursday ..	23	143	6	2	7	9	0	35	14·04	20	30
Friday ..	24	144	6	2	7	9	0	35	15·04	20	41
Saturday ..	25	145	6	2	7	9	0	35	16·04	20	53
Sunday ..	26	146	6	2	7	10	0	36	17·04	21	3
Monday ..	27	147	6	2	7	10	0	36	18·04	21	14
Tuesday ..	28	148	6	1	7	11	0	36	19·04	21	24
Wednesday ..	29	149	6	1	7	11	0	36	20·04	21	33
Thursday ..	30	150	6	1	7	11	0	36	21·04	21	43
Friday ..	31	151	6	1	7	12	0	36	22·04	21	52

Phases of the Moon—JUNE 30 Days.

● New Moon .... 7th, 7h. 26·4m. P.M. | ○ Full Moon ......22nd, 9h. 45·0m. A.M.

☽ First Quarter ..14th, 10h. 44·5m. A.M. | ☾ Last Quarter ....30th, 9h. 23·7m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
			H.	M.	H.	M.	H.	M.	D.	°	N. '
Saturday ..	1	152	6	1	7	12	0	36	23·04	22	0
Sunday ..	2	153	6	1	7	12	0	36	24·04	22	8
Monday ..	3	154	6	1	7	13	0	37	25·04	22	16
Tuesday ..	4	155	6	1	7	13	0	37	26·04	22	23
Wednesday ..	5	156	6	1	7	14	0	37	27·04	22	30
Thursday ..	6	157	6	1	7	14	0	37	28·04	22	37
Friday ..	7	158	6	1	7	14	0	37	29·04	22	43
Saturday ..	8	159	6	1	7	15	0	37	0·72	22	49
Sunday ..	9	160	6	1	7	15	0	38	1·72	22	54
Monday ..	10	161	6	1	7	15	0	38	2·72	22	59
Tuesday ..	11	162	6	1	7	16	0	38	3·72	23	4
Wednesday ..	12	163	6	1	7	16	0	38	4·72	23	8
Thursday ..	13	164	6	1	7	16	0	38	5·72	23	12
Friday ..	14	165	6	1	7	17	0	39	6·72	23	15
Saturday ..	15	166	6	1	7	17	0	39	7·72	23	18
Sunday ..	16	167	6	1	7	17	0	39	8·72	23	20
Monday ..	17	168	6	1	7	17	0	39	9·72	23	23
Tuesday ..	18	169	6	2	7	18	0	39	10·72	23	24
Wednesday .	19	170	6	2	7	18	0	40	11·72	23	26
Thursday ..	20	171	6	2	7	18	0	40	12·72	23	26
Friday ..	21	172	6	2	7	18	0	40	13·72	23	27
Saturday ..	22	173	6	3	7	19	0	40	14·72	23	27
Sunday ..	23	174	6	3	7	19	0	40	15·72	23	27
Monday ..	24	175	6	3	7	19	0	41	16·72	23	26
Tuesday ..	25	176	6	3	7	19	0	41	17·72	23	25
Wednesday ..	26	177	6	3	7	19	0	41	18·72	23	23
Thursday ..	27	178	6	4	7	19	0	41	19·72	23	21
Friday ..	28	179	6	4	7	20	0	42	20·72	23	19
Saturday ..	29	180	6	4	7	20	0	42	21·72	23	16
Sunday ..	30	181	6	5	7	20	0	42	22·72	23	12

Phases of the Moon—JULY 31 Days

● New Moon ....7th, 2h. 17·0m. A.M. | ○ Full Moon ......22nd, 0h. 50·7m. A.M.

☽ First Quarter ....13th, 9h. 35·0m. P.M. | ☾ Last Quarter ....29th, 6h. 25·8m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time. Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H.	M.	H.	M.	D.	N.	
Monday ..	1	182	6	5	7	20	0	42	23·72	23	9
Tuesday ..	2	183	6	5	7	20	0	42	24·72	23	5
Wednesday ..	3	184	6	6	7	20	0	43	25·72	23	0
Thursday ..	4	185	6	6	7	20	0	43	26·72	22	55
Friday ..	5	186	6	6	7	20	0	43	27·72	22	50
Saturday ..	6	187	6	7	7	20	0	43	28·72	22	45
Sunday ..	7	188	6	7	7	20	0	43	0·43	22	39
Monday ..	8	189	6	7	7	20	0	43	1·43	22	32
Tuesday ..	9	190	6	8	7	20	0	44	2·43	22	25
Wednesday ..	10	191	6	8	7	20	0	44	3·43	22	18
Thursday ..	11	192	6	8	7	20	0	44	4·43	22	10
Friday ..	12	193	6	8	7	20	0	44	5·43	22	2
Saturday ..	13	194	6	8	7	20	0	44	6·43	21	54
Sunday ..	14	195	6	9	7	20	0	44	7·43	21	45
Monday ..	15	196	6	9	7	19	0	44	8·43	21	36
Tuesday ..	16	197	6	9	7	19	0	44	9·43	21	27
Wednesday ..	17	198	6	10	7	19	0	45	10·43	21	17
Thursday ..	18	199	6	10	7	19	0	45	11·43	21	7
Friday ..	19	200	6	10	7	19	0	45	12·43	20	56
Saturday ..	20	201	6	11	7	18	0	45	13·43	20	45
Sunday ..	21	202	6	11	7	18	0	45	14·43	20	33
Monday ..	22	203	6	12	7	18	0	45	15·43	20	22
Tuesday ..	23	204	6	12	7	18	0	45	16·43	20	10
Wednesday ..	24	205	6	12	7	17	0	45	17·43	19	58
Thursday ..	25	206	6	13	7	17	0	45	18·43	19	46
Friday ..	26	207	6	13	7	17	0	45	19·43	19	33
Saturday ..	27	208	6	13	7	17	0	45	20·43	19	19
Sunday ..	28	209	6	14	7	16	0	45	21·43	19	6
Monday ..	29	210	6	14	7	16	0	45	22·43	18	52
Tuesday ..	30	211	6	14	7	16	0	45	23·43	18	38
Wednesday ..	31	212	6	15	7	15	0	45	24·43	18	23

Phases of the Moon—AUGUST 31 Days.

○ New Moon.......5th, 9h. 10·1m. A.M. | ● Full Moon ......20th, 3h. 12·3m. P.M.

☽ First Quarter ....12th, 11h. 31·4m. A.M. | ☾ Last Quarter.....28th, 1h. 31·7m. A.M.

Day of the Week	Day of the Month.	Day of the Year.	Indian Standard Time. Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H.	M.	H.	M.	D.	° N.	'
Thursday ..	1	213	6	15	7	15	0	45	25·43	18	8
Friday ..	2	214	6	15	7	14	0	45	26·43	17	53
Saturday ..	3	215	6	16	7	14	0	45	27·43	17	38
Sunday ..	4	216	6	16	7	13	0	45	28·43	17	22
Monday ..	5	217	6	16	7	13	0	45	29·43	17	6
Tuesday ..	6	218	6	17	7	12	0	45	1·15	16	50
Wednesday ..	7	219	6	17	7	12	0	44	2·15	16	33
Thursday ..	8	220	6	17	7	11	0	44	3·15	16	16
Friday ..	9	221	6	18	7	11	0	44	4·15	15	59
Saturday ..	10	222	6	18	7	10	0	44	5·15	15	42
Sunday ..	11	223	6	18	7	9	0	44	6·15	15	24
Monday ..	12	224	6	19	7	9	0	44	7·15	15	7
Tuesday ..	13	225	6	19	7	8	0	44	8·15	14	48
Wednesday ..	14	226	6	19	7	8	0	43	9·15	14	30
Thursday ..	15	227	6	20	7	7	0	43	10·15	14	12
Friday ..	16	228	6	20	7	6	0	43	11·15	13	53
Saturday ..	17	229	6	20	7	6	0	43	12·15	13	34
Sunday ..	18	230	6	20	7	5	0	43	13·15	13	15
Monday ..	19	231	6	21	7	4	0	42	14·15	12	55
Tuesday ..	20	232	6	21	7	4	0	42	15·15	12	36
Wednesday ..	21	233	6	21	7	3	0	42	16·15	12	16
Thursday ..	22	234	6	21	7	2	0	42	17·15	11	56
Friday ..	23	235	6	21	7	1	0	42	18·15	11	36
Saturday ..	24	236	6	22	7	1	0	41	19·15	11	15
Sunday ..	25	237	6	22	7	0	0	41	20·15	10	55
Monday ..	26	238	6	22	6	59	0	40	21·15	10	34
Tuesday ..	27	239	6	22	6	59	0	40	22·15	10	13
Wednesday ..	28	240	6	23	6	58	0	40	23·15	9	52
Thursday ..	29	241	6	23	6	57	0	40	24·15	9	31
Friday ..	30	242	6	23	6	56	0	39	25·15	9	10
Saturday ..	31	243	6	23	6	55	0	39	26·15	8	48

Phases of the Moon—JULY 31 Days

● New Moon ....7th, 2h. 17·0m. A.M. | ○ Full Moon ......22nd, 0h. 50·7m. A.M.

☽ First Quarter ....13th, 9h. 35·0m. P.M. | ☾ Last Quarter ....29th, 6h. 25·8m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
			H.	M.	H.	M.	H.	M.	D.	N.	
Monday ..	1	182	6	5	7	20	0	42	23·72	23	9
Tuesday ..	2	183	6	5	7	20	0	42	24·72	23	5
Wednesday ..	3	184	6	6	7	20	0	43	25·72	23	0
Thursday ..	4	185	6	6	7	20	0	43	26·72	22	55
Friday ..	5	186	6	6	7	20	0	43	27·72	22	50
Saturday ..	6	187	6	7	7	20	0	43	28·72	22	45
Sunday ..	7	188	6	7	7	20	0	43	0·43	22	39
Monday ..	8	189	6	7	7	20	0	43	1·43	22	32
Tuesday ..	9	190	6	8	7	20	0	44	2·43	22	25
Wednesday ..	10	191	6	8	7	20	0	44	3·43	22	18
Thursday ..	11	192	6	8	7	20	0	44	4·43	22	10
Friday ..	12	193	6	8	7	20	0	44	5·43	22	2
Saturday ..	13	194	6	8	7	20	0	44	6·43	21	54
Sunday ..	14	195	6	9	7	20	0	44	7·43	21	45
Monday ..	15	196	6	9	7	19	0	44	8·43	21	36
Tuesday ..	16	197	6	9	7	19	0	44	9·43	21	27
Wednesday ..	17	198	6	10	7	19	0	45	10·43	21	17
Thursday ..	18	199	6	10	7	19	0	45	11·43	21	7
Friday ..	19	200	6	10	7	19	0	45	12·43	20	56
Saturday ..	20	201	6	11	7	18	0	45	13·43	20	45
Sunday ..	21	202	6	11	7	18	0	45	14·43	20	33
Monday ..	22	203	6	12	7	18	0	45	15·43	20	22
Tuesday ..	23	204	6	12	7	18	0	45	16·43	20	10
Wednesday ..	24	205	6	12	7	17	0	45	17·43	19	58
Thursday ..	25	206	6	13	7	17	0	45	18·43	19	46
Friday ..	26	207	6	13	7	17	0	45	19·43	19	33
Saturday ..	27	208	6	13	7	17	0	45	20·43	19	19
Sunday ..	28	209	6	14	7	16	0	45	21·43	19	6
Monday ..	29	210	6	14	7	16	0	45	22·43	18	52
Tuesday ..	30	211	6	14	7	16	0	45	23·43	18	38
Wednesday ..	31	212	6	15	7	15	0	45	24·43	18	23

Phases of the Moon—AUGUST 31 Days.

○ New Moon......5th, 9h. 10·1m. A.M. | ● Full Moon ......20th, 3h. 12·3m. P.M.

☽ First Quarter ....12th, 11h. 31·4m. A.M. | ☾ Last Quarter.....28th, 1h. 31·7m. A.M.

Day of the Week	Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
			H.	M.	H.	M.	H.	M.	D.	° N.	′
Thursday ..	1	213	6	15	7	15	0	45	25·43	18	8
Friday ..	2	214	6	15	7	14	0	45	26·43	17	53
Saturday ..	3	215	6	16	7	14	0	45	27·43	17	38
Sunday ..	4	216	6	16	7	13	0	45	28·43	17	22
Monday ..	5	217	6	16	7	13	0	45	29·43	17	6
Tuesday ..	6	218	6	17	7	12	0	45	1·15	16	50
Wednesday ..	7	219	6	17	7	12	0	44	2·15	16	33
Thursday ..	8	220	6	17	7	11	0	44	3·15	16	16
Friday ..	9	221	6	18	7	11	0	44	4·15	15	59
Saturday ..	10	222	6	18	7	10	0	44	5·15	15	42
Sunday ..	11	223	6	18	7	9	0	44	6·15	15	24
Monday ..	12	224	6	19	7	9	0	44	7·15	15	7
Tuesday ..	13	225	6	19	7	8	0	44	8·15	14	48
Wednesday ..	14	226	6	19	7	8	0	43	9·15	14	30
Thursday ..	15	227	6	20	7	7	0	43	10·15	14	12
Friday ..	16	228	6	20	7	6	0	43	11·15	13	53
Saturday ..	17	229	6	20	7	6	0	43	12·15	13	34
Sunday ..	18	230	6	20	7	5	0	43	13·15	13	15
Monday ..	19	231	6	21	7	4	0	42	14·15	12	55
Tuesday ..	20	232	6	21	7	4	0	42	15·15	12	36
Wednesday ..	21	233	6	21	7	3	0	42	16·15	12	16
Thursday ..	22	234	6	21	7	2	0	42	17·15	11	56
Friday ..	23	235	6	21	7	1	0	42	18·15	11	36
Saturday ..	24	236	6	22	7	1	0	41	19·15	11	15
Sunday ..	25	237	6	22	7	0	0	41	20·15	10	55
Monday ..	26	238	6	22	6	59	0	40	21·15	10	34
Tuesday ..	27	239	6	22	6	59	0	40	22·15	10	13
Wednesday ..	28	240	6	23	6	58	0	40	23·15	9	52
Thursday ..	29	241	6	23	6	57	0	40	24·15	9	31
Friday ..	30	242	6	23	6	56	0	39	25·15	9	10
Saturday ..	31	243	6	23	6	55	0	39	26·15	8	48

Phases of the Moon—JULY 31 Days

● New Moon ....7th, 2h. 17·0m. A.M.

☽ First Quarter ....13th, 9h. 35·0m. P.M.

○ Full Moon ......22nd, 0h. 50·7m. A.M.

☾ Last Quarter ....29th, 6h. 25·8m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time, Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H.	M.	H.	M.	D.	N.	
Monday ..	1	182	6	5	7	20	0	42	23·72	23	9
Tuesday ..	2	183	6	5	7	20	0	42	24·72	23	5
Wednesday ..	3	184	6	6	7	20	0	43	25·72	23	0
Thursday ..	4	185	6	6	7	20	0	43	26·72	22	55
Friday ..	5	186	6	6	7	20	0	43	27·72	22	50
Saturday ..	6	187	6	7	7	20	0	43	28·72	22	45
Sunday ..	7	188	6	7	7	20	0	43	0·43	22	39
Monday ..	8	189	6	7	7	20	0	43	1·43	22	32
Tuesday ..	9	190	6	8	7	20	0	44	2·43	22	25
Wednesday ..	10	191	6	8	7	20	0	44	3·43	22	18
Thursday ..	11	192	6	8	7	20	0	44	4·43	22	10
Friday ..	12	193	6	8	7	20	0	44	5·43	22	2
Saturday ..	13	194	6	8	7	20	0	44	6·43	21	54
Sunday ..	14	195	6	9	7	20	0	44	7·43	21	45
Monday ..	15	196	6	9	7	19	0	44	8·43	21	36
Tuesday ..	16	197	6	9	7	19	0	44	9·43	21	27
Wednesday ..	17	198	6	10	7	19	0	45	10·43	21	17
Thursday ..	18	199	6	10	7	19	0	45	11·43	21	7
Friday ..	19	200	6	10	7	19	0	45	12·43	20	56
Saturday ..	20	201	6	11	7	18	0	45	13·43	20	45
Sunday ..	21	202	6	11	7	18	0	45	14·43	20	33
Monday ..	22	203	6	12	7	18	0	45	15·43	20	22
Tuesday ..	23	204	6	12	7	18	0	45	16·43	20	10
Wednesday ..	24	205	6	12	7	17	0	45	17·43	19	58
Thursday ..	25	206	6	13	7	17	0	45	18·43	19	46
Friday ..	26	207	6	13	7	17	0	45	19·43	19	33
Saturday ..	27	208	6	13	7	17	0	45	20·43	19	19
Sunday ..	28	209	6	14	7	16	0	45	21·43	19	6
Monday ..	29	210	6	14	7	16	0	45	22·43	18	52
Tuesday ..	30	211	6	14	7	16	0	45	23·43	18	38
Wednesday ..	31	212	6	15	7	15	0	45	24·43	18	23

Phases of the Moon—AUGUST 31 Days.

○ New Moon.......5th, 9h. 10·1m. A.M. | ● Full Moon ......20th, 3h. 12·3m. P.M.

☽ First Quarter ....12th, 11h. 31·4m. A.M. | ☾ Last Quarter.....28th, 1h. 31·7m. A.M.

Day of the Week	Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
			H.	M.	H.	M.	H.	M.	D.	° N.	′
Thursday ..	1	213	6	15	7	15	0	45	25·43	18	8
Friday ..	2	214	6	15	7	14	0	45	26·43	17	53
Saturday ..	3	215	6	16	7	14	0	45	27·43	17	38
Sunday ..	4	216	6	16	7	13	0	45	28·43	17	22
Monday ..	5	217	6	16	7	13	0	45	29·43	17	6
Tuesday ..	6	218	6	17	7	12	0	45	1·15	16	50
Wednesday ..	7	219	6	17	7	12	0	44	2·15	16	33
Thursday ..	8	220	6	17	7	11	0	44	3·15	16	16
Friday ..	9	221	6	18	7	11	0	44	4·15	15	59
Saturday ..	10	222	6	18	7	10	0	44	5·15	15	42
Sunday ..	11	223	6	18	7	9	0	44	6·15	15	24
Monday ..	12	224	6	19	7	9	0	44	7·15	15	7
Tuesday ..	13	225	6	19	7	8	0	44	8·15	14	48
Wednesday ..	14	226	6	19	7	8	0	43	9·15	14	30
Thursday ..	15	227	6	20	7	7	0	43	10·15	14	12
Friday ..	16	228	6	20	7	6	0	43	11·15	13	53
Saturday ..	17	229	6	20	7	6	0	43	12·15	13	34
Sunday ..	18	230	6	20	7	5	0	43	13·15	13	15
Monday ..	19	231	6	21	7	4	0	42	14·15	12	55
Tuesday ..	20	232	6	21	7	4	0	42	15·15	12	36
Wednesday ..	21	233	6	21	7	3	0	42	16·15	12	16
Thursday ..	22	234	6	21	7	2	0	42	17·15	11	56
Friday ..	23	235	6	21	7	1	0	42	18·15	11	36
Saturday ..	24	236	6	22	7	1	0	41	19·15	11	15
Sunday ..	25	237	6	22	7	0	0	41	20·15	10	55
Monday ..	26	238	6	22	6	59	0	40	21·15	10	34
Tuesday ..	27	239	6	22	6	59	0	40	22·15	10	13
Wednesday ..	28	240	6	23	6	58	0	40	23·15	9	52
Thursday ..	29	241	6	23	6	57	0	40	24·15	9	31
Friday ..	30	242	6	23	6	56	0	39	25·15	9	10
Saturday ..	31	243	6	23	6	55	0	39	26·15	8	48

Phases of the Moon—SEPTEMBER 30 Days.

ew Moon ...... 3rd, 5h. 17·5m. P.M. | ○ Full Moon.....19th, 4h. 45·8m. A.M.

irst Quarter.....11th, 4h. 27·1m. A.M. | ☾ Last Quarter.... 26th, 7h. 36·8m. A.M

f the Week.	Day of the Month.	Day of the Year.	Indian Standard Time. Sunrise. A.M.		Sunset P.M.		True Noon. P.M.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H.	M.	H.	M.	D.	° N.	′
y ..	1	244	6	23	6	55	0	39	27·15	8	27
y ..	2	245	6	24	6	54	0	39	28·15	8	5
y ..	3	246	6	24	6	53	0	38	29·15	7	43
day ..	4	247	6	24	6	52	0	38	0·81	7	21
ay ..	5	248	6	24	6	51	0	38	1·81	6	59
..	6	249	6	24	6	50	0	37	2·81	6	36
y ..	7	250	6	25	6	50	0	37	3·81	6	14
..	8	251	6	25	6	49	0	37	4·81	5	51
..	9	252	6	25	6	48	0	36	5·81	5	29
..	10	253	6	25	6	47	0	36	6·81	5	6
day ..	11	254	6	25	6	46	0	36	7·81	4	43
y ..	12	255	6	25	6	45	0	35	8·81	4	20
..	13	256	6	26	6	44	0	35	9·81	3	57
y ..	14	257	6	26	6	43	0	35	10·81	3	35
..	15	258	6	26	6	43	0	34	11·81	3	12
..	16	259	6	26	6	42	0	34	12·81	2	48
..	17	260	6	26	6	41	0	33	13·81	2	25
lay ..	18	261	6	27	6	40	0	33	14·81	2	2
y ..	19	262	6	27	6	39	0	33	15·81	1	39
..	20	263	6	27	6	38	0	32	16·81	1	16
y ..	21	264	6	27	6	37	0	32	17·81	0	52
..	22	265	6	27	6	36	0	32	18·81	0	29
..	23	266	6	27	6	36	0	31	19·81	N. 0	6
..	24	267	6	28	6	35	0	31	20·81	S. 0	18
ay ..	25	268	6	28	6	34	0	31	21·81	0	41
y ..	26	269	6	28	6	33	0	30	22·81	1	5
..	27	270	6	28	6	32	0	30	23·81	1	28
..	28	271	6	28	6	31	0	30	24·81	1	51
..	29	272	6	29	6	30	0	29	25·81	2	15
..	30	273	6	29	6	29	0	29	26·81	2	38

Phases of the Moon—OCTOBER 31 Days.

● New Moon ...... 3rd, 3h. 49·3m. A.M. | ○ Full Moon ......18th, 5h. 35·9m. P.M.

☽ First Quarter ....10th, 11h. 35·2m. P.M. | ☾ Last Quarter....25th, 1h. 51·2m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time. Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H.	M.	H.	M.	D.	°	S. '
Tuesday ..	1	274	6	29	6	29	0	28	27·81	3	1
Wednesday ..	2	275	6	29	6	28	0	28	28·81	3	25
Thursday ..	3	276	6	29	6	27	0	28	0·37	3	48
Friday ..	4	277	6	30	6	26	0	28	1·37	4	11
Saturday ..	5	278	6	30	6	25	0	27	2·37	4	34
Sunday ..	6	279	6	30	6	24	0	27	3·37	4	58
Monday ..	7	280	6	30	6	24	0	27	4·37	5	21
Tuesday ..	8	281	6	30	6	23	0	27	5·37		44
Wednesday ..	9	282	6	31	6	22	0	26	6·37		6
Thursday ..	10	283	6	31	6	21	0	26	7·37		29
Friday ..	11	284	6	31	6	20	0	26	8·37	6	52
Saturday ..	12	285	6	31	6	19	0	25	9·37	7	15
Sunday ..	13	286	6	32	6	19	0	25	10·37	7	37
Monday ..	14	287	6	32	6	18	0	25	11·37	8	0
Tuesday ..	15	288	6	33	6	17	0	25	12·37	8	22
Wednesday ..	16	289	6	33	6	16	0	25	13·37	8	44
Thursday ..	17	290	6	33	6	16	0	25	14·37	9	6
Friday ..	18	291	6	34	6	15	0	24	15·37	9	28
Saturday ..	19	292	6	34	6	14	0	24	16·37	9	50
Sunday ..	20	293	6	34	6	14	0	24	17·37	10	12
Monday ..	21	294	6	34	6	13	0	24	18·37	10	33
Tuesday ..	22	295	6	35	6	12	0	23	19·37	10	55
Wednesday ..	23	296	6	35	6	12	0	23	20·37	11	16
Thursday ..	24	297	6	36	6	11	0	23	21·37	11	37
Friday ..	25	298	6	36	6	10	0	23	22·37	11	58
Saturday ..	26	299	6	36	6	10	0	23	23·37	12	18
Sunday ..	27	300	6	37	6	9	0	23	24·37	12	39
Monday ..	28	301	6	37	6	9	0	23	25·37	12	59
Tuesday ..	29	302	6	37	6	8	0	23	26·37	13	19
Wednesday ..	30	303	6	37	6	7	0	23	27·37	13	39
Thursday ..	31	304	6	38	6	7	0	22	28·37	13	59

Phases of the Moon—NOVEMBER 30 Days.

● New Moon .... [illegible] P.M. | ○ Full Moon ...... 17th, 5h. 44·2m. A.M.
☽ First Quarter.... [illegible] P.M. | ☾ Last Quarter .... 23rd, 9h. 34·3m. P.M.

Day of the Week.		Day of the Month.	Day of the Year.	Indian Standard Time. Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.		Moon's age at Noon. ☾	Sun's Declination at Mean Noon.	
				H.	M.	H.	M.	H.	M.	D.	° S.	′
Friday	..	1	305	6	38	6	6	0	22	29·37	14	18
Saturday	..	2	[illegible]	6	[illegible]	6	6	0	22	0·80	14	38
Sunday	..	3	307	6	39	6	5	0	22	1·80	14	57
Monday	..	4	308	6	40	6	5	0	22	2·80	15	15
Tuesday	..	5	309	6	40	6	4	0	22	3·80	15	34
Wednesday	..	6	310	6	41	6	4	0	22	4·80	15	52
Thursday	..	7	311	6	41	6	4	0	22	5·80	16	10
Friday	..	8	312	6	42	6	4	0	22	6·80	16	28
Saturday	..	9	313	6	42	6	4	0	23	7·80	16	45
Sunday	..	10	314	6	43	6	3	0	23	8·80	17	2
Monday	..	11	315	6	43	6	3	0	23	9·80	17	19
Tuesday	..	12	316	6	44	6	3	0	23	10·80	17	36
Wednesday	..	13	317	6	44	6	3	0	23	11·80	17	52
Thursday	..	14	318	6	45	6	2	0	23	12·80	18	8
Friday	..	15	319	6	45	6	2	0	23	13·80	18	23
Saturday	..	16	320	6	46	6	1	0	23	14·80	18	39
Sunday	..	17	321	6	46	6	1	0	23	15·80	18	54
Monday	..	18	322	6	47	6	1	0	23	16·80	19	8
Tuesday	..	19	323	6	48	6	0	0	23	17·80	19	23
Wednesday	..	20	324	6	48	6	0	0	24	18·80	19	36
Thursday	..	21	325	6	49	6	0	0	24	19·80	19	50
Friday	..	22	326	6	49	6	0	0	24	20·80	20	3
Saturday	..	23	327	6	50	6	0	0	24	21·80	20	16
Sunday	..	24	328	6	51	6	0	0	25	22·80	20	29
Monday	..	25	329	6	51	6	0	0	25	23·80	20	41
Tuesday	..	26	330	6	52	6	0	0	25	24·80	20	52
Wednesday	..	27	331	6	53	6	0	0	25	25·80	21	4
Thursday	..	28	332	6	53	6	0	0	26	26·80	21	15
Friday	..	29	333	6	54	6	0	0	26	27·80	21	25
Saturday	..	30	334	6	54	6	0	0	27	28·80	21	35

Phases of the Moon—DECEMBER 31 Days.

● New Moon ......1st, 10h. 18·4m. A.M. | ○ Full Moon.......16th, 5h. 8·2m. P.M.
☽ First Quarter .... 9th, 3h. 11·7m. P.M. | ☾ Last Quarter ... 23rd, 7h. 57·3m. A.M.
● New Moon......31st, 5h. 11·7m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's age at Noon.	Sun's Declination at Mean Noon.	
			Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
			H.	M.	H.	M.	H.	M.	D.	°	S.
Sunday ..	1	335	6	55	6	0	0	28	29·80	21	45
Monday ..	2	336	6	55	6	0	0	28	1·10	21	54
Tuesday ..	3	337	6	56	6	0	0	28	2·10	22	3
Wednesday ..	4	338	6	57	6	0	0	29	3·10	22	12
Thursday ..	5	339	6	58	6	0	0	29	4·10	22	20
Friday ..	6	340	6	59	6	1	0	30	5·10	22	27
Saturday ..	7	341	6	59	6	1	0	30	6·10	22	34
Sunday ..	8	342	6	59	6	1	0	30	7·10	22	41
Monday ..	9	343	7	0	6	1	0	31	8·10	22	47
Tuesday ..	10	344	7	0	6	2	0	31	9·10	22	53
Wednesday ..	11	345	7	1	6	2	0	32	10·10	22	58
Thursday ..	12	346	7	2	6	2	0	32	11·10	23	3
Friday ..	13	347	7	2	6	3	0	33	12·10	23	8
Saturday ..	14	348	7	3	6	3	0	33	13·10	23	12
Sunday ..	15	349	7	3	6	3	0	34	14·10	23	15
Monday ..	16	350	7	4	6	4	0	35	15·10	23	18
Tuesday ..	17	351	7	4	6	4	0	35	16·10	23	21
Wednesday ..	18	352	7	5	6	5	0	36	17·10	23	23
Thursday ..	19	353	7	5	6	5	0	36	18·10	23	25
Friday	20	354	7	6	6	6	0	37	19·10	23	26
Saturday ..	21	355	7	7	6	6	0	37	20·10	23	27
Sunday ..	22	356	7	7	6	6	0	38	21·10	23	27
Monday ..	23	357	7	8	6	7	0	38	22·10	23	27
Tuesday ..	24	358	7	8	6	7	0	39	23·10	23	26
Wednesday ..	25	359	7	9	6	8	0	39	24·10	23	25
Thursday ..	26	360	7	9	6	9	0	40	25·10	23	23
Friday ..	27	361	7	10	6	9	0	40	26·10	23	21
Saturday ..	28	362	7	10	6	10	0	41	27·10	23	19
Sunday ..	29	363	7	11	6	10	0	41	28·10	23	16
Monday ..	30	364	7	11	6	11	0	41	29·10	23	12
Tuesday ..	31	365	7	11	6	11	0	42	0·31	23	8

Phases of the Moon—NOVEMBER 30 Days.

● New Moon .... 1st, [illegible] P.M. | ◯ Full Moon ...... 17th, 5h. 44·2m. A.M.
◐ First Quarter.... 9th, 7h. [illegible] P.M. | ☾ Last Quarter .... 23rd, 9h. 34·3m. P.M

Days of the Week.		Day of the Month.	Day of the Year.	Indian Standard Time. Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.		Moon's age at Noon.	Sun's Declination at Mean Noon.	
				H.	M.	H.	M.	H.	M.	D.	° S.	′
Friday	..	1	305	6	38	6	6	0	22	29·37	14	18
Saturday	..	2	306	6	39	6	6	0	22	0·80	14	38
Sunday	..	3	307	6	39	6	5	0	22	1·80	14	57
Monday	..	4	308	6	40	6	5	0	22	2·80	15	15
Tuesday	..	5	309	6	40	6	4	0	22	3·80	15	34
Wednesday	..	6	310	6	41	6	4	0	22	4·80	15	52
Thursday	..	7	311	6	41	6	4	0	22	5·80	16	10
Friday	..	8	312	6	42	6	4	0	22	6·80	16	28
Saturday	..	9	313	6	42	6	4	0	23	7·80	16	45
Sunday	..	10	314	6	43	6	3	0	23	8·80	17	2
Monday	..	11	315	6	43	6	3	0	23	9·80	17	19
Tuesday	..	12	316	6	44	6	3	0	23	10·80	17	36
Wednesday	..	13	317	6	44	6	3	0	23	11·80	17	52
Thursday	..	14	318	6	45	6	2	0	23	12·80	18	8
Friday	..	15	319	6	45	6	2	0	23	13·80	18	23
Saturday	..	16	320	6	46	6	1	0	23	14·80	18	39
Sunday	..	17	321	6	46	6	1	0	23	15·80	18	54
Monday	..	18	322	6	47	6	1	0	23	16·80	19	8
Tuesday	..	19	323	6	48	6	0	0	23	17·80	19	23
Wednesday	..	20	324	6	48	6	0	0	24	18·80	19	36
Thursday	..	21	325	6	49	6	0	0	24	19·80	19	50
Friday	..	22	326	6	49	6	0	0	24	20·80	20	3
Saturday	..	23	327	6	50	6	0	0	24	21·80	20	16
Sunday	..	24	328	6	51	6	0	0	25	22·80	20	29
Monday	..	25	329	6	51	6	0	0	25	23·80	20	41
Tuesday	..	26	330	6	52	6	0	0	25	24·80	20	52
Wednesday	..	27	331	6	53	6	0	0	25	25·80	21	4
Thursday	..	28	332	6	53	6	0	0	26	26·80	21	15
Friday	..	29	333	6	54	6	0	0	26	27·80	21	25
Saturday	..	30	334	6	54	6	0	0	27	28·80	21	35

Phases of the Moon—DECEMBER 31 Days.

● New Moon ......1st, 10h. 18·4m. A.M. | ○ Full Moon.......16th, 5h. 8·2m. P.M.
☽ First Quarter .... 9th, 3h. 11·7m. P.M. | ☾ Last Quarter ... 23rd, 7h. 57·3m. A.M.
● New Moon......31st, 5h. 11·7m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's age at Noon.	Sun's Declination at Mean Noon.	
			Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
			H.	M.	H.	M.	H.	M.	D.	°	′
Sunday ..	1	335	6	55	6	0	0	28	29·80	21	45
Monday ..	2	336	6	55	6	0	0	28	1·10	21	54
Tuesday ..	3	337	6	56	6	0	0	28	2·10	22	3
Wednesday ..	4	338	6	57	6	0	0	29	3·10	22	12
Thursday ..	5	339	6	58	6	0	0	29	4·10	22	20
Friday ..	6	340	6	59	6	1	0	30	5·10	22	27
Saturday ..	7	341	6	59	6	1	0	30	6·10	22	34
Sunday ..	8	342	6	59	6	1	0	30	7·10	22	41
Monday ..	9	343	7	0	6	1	0	31	8·10	22	47
Tuesday ..	10	344	7	0	6	2	0	31	9·10	22	53
Wednesday ..	11	345	7	1	6	2	0	32	10·10	22	58
Thursday ..	12	346	7	2	6	2	0	32	11·10	23	3
Friday ..	13	347	7	2	6	3	0	33	12·10	23	8
Saturday ..	14	348	7	3	6	3	0	33	13·10	23	12
Sunday ..	15	349	7	3	6	3	0	34	14·10	23	15
Monday ..	16	350	7	4	6	4	0	35	15·10	23	18
Tuesday ..	17	351	7	4	6	4	0	35	16·10	23	21
Wednesday ..	18	352	7	5	6	5	0	36	17·10	23	23
Thursday ..	19	353	7	5	6	5	0	36	18·10	23	25
Friday	20	354	7	6	6	6	0	37	19·10	23	26
Saturday ..	21	355	7	7	6	6	0	37	20·10	23	27
Sunday ..	22	356	7	7	6	6	0	38	21·10	23	27
Monday ..	23	357	7	8	6	7	0	38	22·10	23	27
Tuesday ..	24	358	7	8	6	7	0	39	23·10	23	26
Wednesday ..	25	359	7	9	6	8	0	39	24·10	23	25
Thursday ..	26	360	7	9	6	9	0	40	25·10	23	23
Friday ..	27	361	7	10	6	9	0	40	26·10	23	21
Saturday ..	28	362	7	10	6	10	0	41	27·10	23	19
Sunday ..	29	363	7	11	6	10	0	41	28·10	23	16
Monday ..	30	364	7	11	6	11	0	41	29·10	23	12
Tuesday ..	31	365	7	11	6	11	0	42	0·31	23	8

Phases of the Moon—NOVEMBER 30 Days.

● New Moon .... 1st, [illegible] P.M.

☽ First Quarter.... [illegible] P.M.

○ Full Moon ...... 17th, 5h. 44·2m. A.M.

☾ Last Quarter .... 23rd, 9h. 34·3m. P.M.

Day of the Week.		Day of the Month.	Day of the Year.	Indian Standard Time. Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.		Moon's age at Noon.	Sun's Declination at Mean Noon.	
				H.	M.	H.	M.	H.	M.	D.	S. °	'
Friday	..	1	305	6	38	6	6	0	22	29·37	14	18
Saturday	..	2	306	6	38	6	6	0	22	0·80	14	38
Sunday	..	3	307	6	39	6	5	0	22	1·80	14	57
Monday	..	4	308	6	40	6	5	0	22	2·80	15	15
Tuesday	..	5	309	6	40	6	4	0	22	3·80	15	34
Wednesday	..	6	310	6	41	6	4	0	22	4·80	15	52
Thursday	..	7	311	6	41	6	4	0	22	5·80	16	10
Friday	..	8	312	6	42	6	4	0	22	6·80	16	28
Saturday	..	9	313	6	42	6	4	0	23	7·80	16	45
Sunday	..	10	314	6	43	6	3	0	23	8·80	17	2
Monday	..	11	315	6	43	6	3	0	23	9·80	17	19
Tuesday	..	12	316	6	44	6	3	0	23	10·80	17	36
Wednesday	..	13	317	6	44	6	3	0	23	11·80	17	52
Thursday	..	14	318	6	45	6	2	0	23	12·80	18	8
Friday	..	15	319	6	45	6	2	0	23	13·80	18	23
Saturday	..	16	320	6	46	6	1	0	23	14·80	18	39
Sunday	..	17	321	6	46	6	1	0	23	15·80	18	54
Monday	..	18	322	6	47	6	1	0	23	16·80	19	8
Tuesday	..	19	323	6	48	6	0	0	23	17·80	19	23
Wednesday	..	20	324	6	48	6	0	0	24	18·80	19	36
Thursday	..	21	325	6	49	6	0	0	24	19·80	19	50
Friday	..	22	326	6	49	6	0	0	24	20·80	20	3
Saturday	..	23	327	6	50	6	0	0	24	21·80	20	16
Sunday	..	24	328	6	51	6	0	0	25	22·80	20	29
Monday	..	25	329	6	51	6	0	0	25	23·80	20	41
Tuesday	..	26	330	6	52	6	0	0	25	24·80	20	52
Wednesday	..	27	331	6	53	6	0	0	25	25·80	21	4
Thursday	..	28	332	6	53	6	0	0	26	26·80	21	15
Friday	..	29	333	6	54	6	0	0	26	27·80	21	25
Saturday	..	30	334	6	54	6	0	0	27	28·80	21	35

Phases of the Moon—DECEMBER 31 Days.

● New Moon ......1st, 10h. 18·4m. A.M.	○ Full Moon.......16th, 5h. 8·2m. P.M.
☽ First Quarter .... 9th, 3h. 11·7m. P.M.	☾ Last Quarter ... 23rd, 7h. 57·3m. A.M.
	● New Moon......31st, 5h. 11·7m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Indian Standard Time.						Moon's age at Noon.	Sun's Declination at Mean Noon.	
			Sunrise. A.M.		Sunset. P.M.		True Noon. P.M.				
			H.	M.	H.	M.	H.	M.	D.	°	S. '
Sunday ..	1	335	6	55	6	0	0	28	29·80	21	45
Monday ..	2	336	6	55	6	0	0	28	1·10	21	54
Tuesday ..	3	337	6	56	6	0	0	28	2·10	22	3
Wednesday ..	4	338	6	57	6	0	0	29	3·10	22	12
Thursday ..	5	339	6	58	6	0	0	29	4·10	22	20
Friday ..	6	340	6	59	6	1	0	30	5·10	22	27
Saturday ..	7	341	6	59	6	1	0	30	6·10	22	34
Sunday ..	8	342	6	59	6	1	0	30	7·10	22	41
Monday ..	9	343	7	0	6	1	0	31	8·10	22	47
Tuesday ..	10	344	7	0	6	2	0	31	9·10	22	53
Wednesday ..	11	345	7	1	6	2	0	32	10·10	22	58
Thursday ..	12	346	7	2	6	2	0	32	11·10	23	3
Friday ..	13	347	7	2	6	3	0	33	12·10	23	8
Saturday ..	14	348	7	3	6	3	0	33	13·10	23	12
Sunday ..	15	349	7	3	6	3	0	34	14·10	23	15
Monday ..	16	350	7	4	6	4	0	35	15·10	23	18
Tuesday ..	17	351	7	4	6	4	0	35	16·10	23	21
Wednesday ..	18	352	7	5	6	5	0	36	17·10	23	23
Thursday ..	19	353	7	5	6	5	0	36	18·10	23	25
Friday	20	354	7	6	6	6	0	37	19·10	23	26
Saturday ..	21	355	7	7	6	6	0	37	20·10	23	27
Sunday ..	22	356	7	7	6	6	0	38	21·10	23	27
Monday ..	23	357	7	8	6	7	0	38	22·10	23	27
Tuesday ..	24	358	7	8	6	7	0	39	23·10	23	26
Wednesday ..	25	359	7	9	6	8	0	39	24·10	23	25
Thursday ..	26	360	7	9	6	9	0	40	25·10	23	23
Friday ..	27	361	7	10	6	9	0	40	26·10	23	21
Saturday ..	28	362	7	10	6	10	0	41	27·10	23	19
Sunday ..	29	363	7	11	6	10	0	41	28·10	23	16
Monday ..	30	364	7	11	6	11	0	41	29·10	23	12
Tuesday ..	31	365	7	11	6	11	0	42	0·31	23	8

CALENDAR FOR 1930.

January.

S.	...	5	12	19	26	...
M.	...	6	13	20	27	...
Tu.	...	7	14	21	28	...
W.	1	8	15	22	29	...
Th.	2	9	16	23	30	...
F.	3	10	17	24	31	...
S.	4	11	18	25		...

February.

S.	...	2	9	16	23	...
M.	...	3	10	17	24	...
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	...	6	13	20	27	...
F.	...	7	14	21	28	...
S.	1	8	15	22	...	...

March.

S.	...	2	9	16	23	30
M.	...	3	10	17	24	31
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	...	6	13	20	27	...
F.	...	7	14	21	28	...
S.	1	8	15	22	29	...

April.

S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	...	...
F.	4	11	18	25	...	..
S.	5	12	19	26	...	...

May.

S.	...	4	11	18	25	...
M.	...	5	12	19	26	...
Tu.	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th.	1	8	15	22	29	...
F.	2	9	16	23	30	...
S.	3	10	17	24	31	...

June.

S.	1	8	15	22	29	..
M.	2	9	16	23	30	...
Tu.	3	10	17	24	...	
W.	4	11	18	25	...	...
Th.	5	12	19	26	...	...
F.	6	13	20	27	...	...
S.	7	14	21	28	...	...

July.

S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	31	...
F.	4	11	18	25	...	...
S.	5	12	19	26	...	...

August.

S.	...	3	10	17	24	31
M.	...	4	11	18	25	...
Tu.	...	5	12	19	26	...
W.	...	6	13	20	27	...
Th.	...	7	14	21	28	...
F.	1	8	15	22	29	...
S.	2	9	16	23	30	...

September.

S.	...	7	14	21	28	...
M.	1	8	15	22	29	
Tu.	2	9	16	23	30	...
W.	3	10	17	24	...	...
Th.	4	11	18	25	...	...
F.	5	12	19	26	...	...
S.	6	13	20	27	...	...

October.

S.	...	5	12	19	26	...
M.	...	6	13	20	27	...
Tu.	...	7	14	21	28	...
W.	1	8	15	22	29	...
Th.	2	9	16	23	30	...
F.	3	10	17	24	31	...
S.	4	11	18	25	...	...

November.

S.	...	2	9	16	23	30
M.	...	3	10	17	24	...
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	...	6	13	20	27	...
F.	...	7	14	21	28	...
S.	1	8	15	22	29	...

December.

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Tu.	2	9	16	23	30	...
W.	3	10	17	24	31	...
Th.	4	11	18	25	...	...
F.	5	12	19	26	...	...
S.	6	13	20	27	...	...

Preface to the XVI Annual Volume

OF THE

Indian Year Book, 1929.

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The Times of India, Bombay,
January, 1929.

ABKARI.—Excise
ACHHUT.—Untouc...
ADHIRAJ.—"Lord...
'Raja," &c., it mea...
AFSAR.—A corru...
AHLUWALIA.—Na...
resident at the villa...
AIN.—A timber ...
AKALI.—Original...
band founded by ...
1708): now, a ...
army (dal) of relo...
AKHARA.—A Hi...
AKHUNDZADA.—...
ALIJAH.—Of ex...
ALIGHOL.—Li...
kind of athlete...
self-defence.
ALI RAJA.—S...
AM.—Mango.
AMIL.—A ...
members of the ...
caste consisting ...
and minor offic...
AMIR (corr...
Chief often a ...
ANICUT.—A ...
irrigation pur...
ANJUMAN.—...
medans.
APHUS.—B...
ALPHONSE, th...
Bombay man...
ARZ, ARZI
ASAF.—A ...
ASPRISHYA.—
AUS.—The ...
Ahu, Assam.—
AVATAR.—
AYURVEDA
BABA.—Li...
Irish "Your ...
BABU.—(1...
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(2) Hence ...
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January, 1929.

An Indian Glossary.

ABKARI.—Excise of liquors and drugs.

[illegible].—Untouchable (Hindi) Asuddhar.

[illegible].—"Lord of the Lands;" added to [illegible] it means "paramount."

AFSAR.—A corruption of the English "officer."

AHLUWALIA.—Name of a princely family [illegible] at the village of Ahlu, near Lahore.

AIN.—A timber tree TERMINALIA TOMENTOSA.

AKALI.—Originally a Sikh devotee, one of a [illegible] Govind Singh (who died [illegible]) a member of the politico-religious army (dal) of reforming Sikhs.

AKHARA.—A Hindu school of gymnastics.

AKHUNDZADA.—Son of a Head Officer.

ALIJAH.—Of exalted rank.

[illegible].—Literally a Mahomedan circle. A kind of athletic club formed for purposes of self-defence.

ALI RAJA.—Sea King (Laccadives).

AM.—Mango.

AMIL.—A name given in Sind to educated members of the Lohana community, a Hindu caste consisting principally of bankers, clerks and minor officials.

AMIR, commonly EMIR.—A Mohammedan Chief often also a personal name.

ANICUT.—A dam or weir across a river for irrigation purposes, Southern India.

ANJUMAN.—A communal gathering of Mahomedans.

APHUS.—Believed to be a corruption of ALPHONSE, the name of the best variety of Bombay mango.

ARZ, ARZI, ARZ-DASHT.—Written petition.

ASAF.—A minister.

ASPRISHYA.—Untouchable (Sanskrit).

AUS.—The early rice crop, Bengal, syn. Ahu, Assam.

AVATAR.—An incarnation of Vishnu.

AYURVEDA.—Hindu science of Medicine.

BABA.—Lit. "Father," a respectful "Mr." Irish "Your Honour."

BABU.—(1) A gentleman in Bengal, corresponding to Pant in the Deccan and Konkan. (2) Hence used by Anglo-Indians of a clerk or accountant. Strictly a 5th or still younger son of a Raja but often used of any son younger than the heir, whilst it has also grown into a term of address=Esquire. There are, however, one or two Rajas whose sons are known respectively as—1st, Kunwar; 2nd, Diwan; 3rd, Thakur; 4th, Lal; 5th Babu.

BABUL.—A common thorny tree, the bark of which is used for tanning, ACACIA ARABICA.

BADMASH.—A bad character: a rascal.

BAGH.—Tiger.

BAGHLA.—(1) A native boat (Buggalow). (2) The common pond heron or paddybird.

BAHADUR.—Lit. "brave" or "warrior"; a title used by both Hindus and Mohammedans, often bestowed by Government; added to other titles, it increases their honour but alone it designates an inferior ruler.

BAIRAGI.—A Hindu religious mendicant.

BAJRA OR BAJRI.—The bulrush millet, a common food-grain, PENNISETUM TYPHOIDEUM; syn. cambu, Madras.

BAKHSHI.—A revenue officer or magistrate.

BAND.—A dam or embankment (Bund).

BANYAN.—A species of fig-tree, FICUS BENGALENSIS.

BARSAT.—(1) A fall of rain, (2) the rainy season.

BASTI.—(1) A village, or collection of huts; (2) A Jain temple, Kanara.

BATTA.—Lit. 'discount' and hence allowances by way of compensation.

BAZAR.—(1) A street lined with shops, India proper; (2) a covered market, Burma.

BEGUM or BEGAM.—The feminine of "Nawab" combined in Bhopal as "Nawab Begum."

BER.—A thorny shrub bearing a fruit like a small plum, ZIZYPHUS JUJUBA.

BESAR.—Apparently a large landowner.

BEWAR.—Name in Central Provinces for shifting cultivation in jungles and hill-sides; syn. taungya, Burma; jhum, North-Eastern India.

BHADOI.—Early autumn crop, Northern India, reaped in the month Bhadon.

BHAGAT OR BHAKTA.—A devotee.

BHAG-BATAI.—System of payment of land revenue in kind.

BHAIBAND.—Relation or man of same caste or community.

BHANG.—The dried leaves of the hemp plant, CANNABIS SATIVA, a narcotic.

BHANWAR.—Light sandy soil; syn. bhur.

BHARAL.—A Himalayan wild sheep, OVIS NAHURA.

BHARAT.—India.

BHARATA-VARSHA.—India.

BHENDI.—A suculent vegetable (HIBISCUS ESCULENTUS).

BHONSLE.—Name of a Maratha dynasty.

BHUP.—Title of the ruler of Cooch Behar.

BHUGTI.—Name of a Baluch tribe.

BHUSA.—Chaff, for fodder.

BHUT.—The spirit of departed persons.

Note.—According to the Hunterian system of transliteration here adopted the vowels have the following values:—a either long as the a in 'father' or short as the u in 'cut,' e as the ai in 'gain,' i either short as the i in 'bib,' or long as the ee in 'feel,' o as the o in 'bone,' u either short as the oo in 'good,' or long as the oo in 'boot,' ai as the i in 'mile,' au as the ou in 'grouse.' This is only a rough guide. The vowel values vary in different parts of India in a marked degree.

BIDRI.—A class of ornamental metalwork, in which blackened pewter is inlaid with silver, named from the town of Bidar, Hyderabad.

BIGHA.—A measure of land varying widely; the standard bigha is generally five-eighths of an acre.

BIR (BID).—A grassland—North India, Gujarat and Kathiawar.

BLACK COTTON SOIL.—A dark-coloured soil, very retentive of moisture, found in Central and Southern India.

BOARD OF REVENUE.—The chief controlling revenue authority in Bengal, the United Provinces and Madras.

BOR.—See BER.

BRINJAL.—A vegetable, SOLANUM MELONGENA; syn. egg-plant.

BUNDER, or bandar.—A harbour or port.

BURUJ.—A bastion in a line of battlements.

CADJAN.—Palm leaves used for thatch.

CHABUK.—A whip.

CHABUTRA.—A platform of mud or plastered brick, used for social gatherings, Northern India.

CHADAR.—A sheet worn as a shawl by men and sometimes by women. (Chudder.)

CHAITYA.—An ancient Buddhist chapel.

CHAMBHAR (CHAMAR).— A caste whose trade is to tan leather.

CHAMPAK.—A tree with fragrant blossoms MICHELIA CHAMPACA.

CHANA.—Gram.

CHAPATI.—A cake of unleavened breads (Chaupatti.)

CHAPRASI.—An orderly or messenger, Northern India; syn. pattawala, Bombay; peon, Madras.

CHARAS.—The resin of the hemp plant. CANNABIS SATIVA, used for smoking.

CHARKHA.—A spinning wheel.

CHARPAI (charpoy).—A bedstead with four legs, and tape stretched across the frame for a mattress.

CHAUDHRI.—Under native rule, a subordinate revenue official; at present the term is applied to the headman or representative of a trade guild.

CHAUKIDAR.—The village watchman and rural policeman.

CHAUTH.—The fourth part of the land revenue, exacted by the Marathas in subject territories.

CHAVR (CHORO, GUJARATI).—Village headquarters.

CHELA.—A pupil, usually in connexion with religious teaching.

CHHAONI.—A collection of thatched huts or barracks; hence a cantonment.

CHHATRAPATI.—One of sufficient dignity to have an umbrella carried over him.

CHHATRI.—(1) An umbrella, (2) domed building such as a cenotaph.

CHIEF COMMISSIONER.—The administrative head of one of the lesser Provinces in British India.

CHAIKOR.—A kind of partridge, CACCABIS CHUCAR.

CHIKU.—The Bombay name for the fruit of ACHRAS SAPOTA, the Sapodilla plum of the West Indies.

CHINAR.—A plane tree, PLATANUS ORIENTALIS.

CHINKARA.—The Indian gazelle, GAZELLA BENNETTI, often called 'ravine deer.'

CHITAL.—The spotted deer, CERVUS AXIS.

CHOLAM.—Name in Southern India for the large millet, ANDROPOGON SORGHUM; syn. jowar.

CHOLI.—A kind of short bodice worn by women.

CHOWRIE.—Fly-whisk.

CHUNAM, chuna.—Lime plaster.

CIRCLE.—The area in charge of—(1) A Conservator of forests; (2) A Postmaster or Deputy Postmaster-General; (3) A Superintending Engineer of the Public Works Department.

CIVIL SURGEON.—The officer in medical charge of a District.

COGNIZABLE.—An offence for which the culprit can be arrested by the police without a warrant.

COLLECTOR.—The administrative head of a District in Regulation Provinces corresponding to the Deputy Commissioner in non-regulation areas.

COMMISSIONER.—(1) The officer in charge of a Division or group of Districts; (2) the head of various departments, such as Stamps, Excise, etc.

COMPOUND.—The garden and open land attached to a house. An Anglo-Indian word perhaps derived from 'kumpan,' a hedge.

CONSERVATOR.—The Supervising Officer in charge of a Circle in the Forest Department.

COUNCIL BILLS.—Bills or telegraphic transfers drawn on the Indian Government by the Secretary of State in Council.

COUNT.—Cotton yarns are described as 20's, 30's, etc., counts when not more than a like number of hanks of 840 yards go to the pound avoirdupois.

COURT OF WARDS.—An establishment for managing estates of minors and other disqualified persons.

CRORE, karor.—Ten millions.

DADA.—Lit. "grandfather" (paternal); any venerable person. In Bombay slang a "hooligan boss."

DAFFADAR.—A non-commissioned native officer in the army or police.

DAFTAR.—Office records.

DAFTARI.—Record-keeper.

DAH OR DAO.—A cutting instrument with no point, used as a sword, and also as an axe, Assam and Burma.

DAK CHAUKI.—A stage on a stage-coach route. Dak bungalow is the travellers' bungalow maintained at such stages in days before railways.

DAKAITI, DACOITY.—Robbery by five or more persons.

DAL.—A generic term applied to various pulses.

DAM.—An old copper coin, one-fortieth of a rupee.

DARBAR.—(1) A ceremonial assembly, especially one presided over by the Ruler of a State; hence (2) the Government of a Native State.

DARGAH.—A Mahomedan shrine or tomb of a saint.

DARI, Dhurrie.—A rug or carpet, usually of cotton, but sometimes of wool.

DAROGHA.—The title of officials in various departments; now especially applied to subordinate controlling Officers in the Police and Jail Departments.

DARWAN.—A door-keeper.

DARWAZA.—A gateway.

DAULA AND DAULAT.—State.

DEB.—A Brahminical priestly title; taken from the name of a divinity.

DEBOTTAR.—Land assigned for the upkeep of temples or maintenance of Hindu worship.

DEODAR.—A cedar, CEDRUS LIBANI or C. DEODARA.

DEPUTY COMMISSIONER.—The Administrative head of a District in non-regulation areas corresponding to the Collector in Regulation Provinces.

DEPUTY MAGISTRATE AND COLLECTOR.—A subordinate of the Collector, having executive and judicial (revenue and criminal) powers; equivalent to Extra Assistant Commissioner in non-regulation areas.

DESAI.—A revenue official under native (Maratha) rule.

DESH.—(1) Native country; (2) the plains as opposed to the hills, Northern India; (3) the plateau of the Deccan above the Ghats.

DESHMUKH.—A petty official under native (Maratha) rule.

DEVA.—A deity.

DEVADASI.—A girl dedicated to temple or God.

DEVASTHAN.—Land assigned for the upkeep of a temple or other religious foundation.

DEWAN.—See DIWAN.

DHAK.—A tree, BUTEA FRONDOSA, with brilliant orange-scarlet flowers used for dyeing, and also producing a gum; syn. palas, Bengal and Bombay; Chhiul, Central India.

DHAMANI.—A heavy shighram or tonga drawn by bullocks.

DHARMSALA.—A charitable institution provided as a resting-place for pilgrims or travellers, Northern India.

DHATURA.—A stupefying drug, DATURA ALSTUOSA.

DHENKLI.—Name in Northern India for the lever used in raising water; syn. picottah.

DHOBI.—A washerman.

DHOTI.—The loincloth worn by men.

DISTRICT.—The most important administrative unit of area.

DIVISION.—(1) A group of districts for administrative and revenue purposes, under a Commissioner; (2) the area in charge of a Deputy Conservator of Forests, usually corresponding with a (revenue) District; (3) the area under a Superintendent of Post Offices; (4) a group of (revenue) districts under an Executive Engineer of the Public Works Department.

DIWAN.—A Vizier or other First Minister to a native Chief, either Hindu or Mohammedan, and equal in rank with "Sardar" under which see other equivalents. The term is also used of a Council of State.

DIWAN (SIKH).—Communal Gathering.

DIWANI.—Civil, especially revenue, administration; now used generally in Northern India of civil justice and Courts.

DOAB.—The tract between two rivers, especially that between the Ganges and Jumna.

DOM.—Untouchable caste in Northern India.

DRY CROP.—A crop grown without artificial irrigation.

DRY RATE.—The rate of revenue for unirrigated land.

DUN.—A valley, Northern India.

EKKA.—A small two-wheeled conveyance drawn by a pony, Northern India.

ELCHI, ELACHI.—Cardamom.

ELAYA RAJA.—Title given to the heir of the Maharaja of Travancore.

EXTRA ASSISTANT COMMISSIONER.—See Deputy Magistrate and Collector.

FAKIR.—Properly an Islamic mendicant or a mendicant who has no creed, but often loosely used of Hindu mendicants also.

FAMINE INSURANCE GRANT.—An annual provision from revenue to meet direct famine expenditure, or the cost of certain classes of public works, or to avoid debt.

FARMAN.—An imperial (Mughal) order or grant.

FARZAND (with defining words added)—"Favorite" or "beloved."

FASLI.—Era solar started by Akbar, A.C. minus 572-3.

FATEH.—"Victory."

FATEH JEANG.—"Victorious in Battle" (a title of the Nizam).

FATWA.—Judicial decree or written opinion of a doctor of Muslim law.

FAUJDARI.—Relating to a criminal court; criminal proceedings.

FAUJDARI.—Under native rule, the area under a Faujdar or subordinate governor; now used generally of Magistrates' Criminal Courts.

FINANCIAL COMMISSIONER.—The chief controlling revenue authority in the Punjab, Burma and the Central Provinces.

FITTON GARI.—A phæton, Bombay. Derived from the English.

GADDI, Gadi.—The cushion or throne of (Hindu) royalty.

GAEKWAR (sometimes GUICOWAR).—Title with "Maharaja" added of the ruler of Baroda. It was once a caste name and means "cow-herd," *i.e.*, the protector of the sacred animal; but later on, in common with "Holkar" and "Sindhia," it came to be a dynastic appellation and consequently regarded as a title. Thus, a Prince becomes "Gaekwar" on succeeding to the estate of Baroda; "Holkar," to that of Indore and "Sindhia," to that of Gwalior.

GANJA.—The unfertilised flowers of the cultivated female hemp plant, CANNABIS SATIVA, used for smoking.

GAUR.—Wild cattle, commonly called 'bison' BOS GAURUS.

GAYAL.—A species of wild cattle, BOS FRONTALIS, domesticated on the North-East Frontier; syn. mithan.

GHADR.—Mutiny, Revolution.

GHARRIE (GARI).—A carriage, cart.

GHAT, Ghaut.—(1) A landing-place on a river; (2) the bathing steps on the bank of a tank; (3) a pass up a mountain; (4) in European usage, a mountain range. In the last sense especially applied to the Eastern and Western Ghats.

GHATWAL.—A tenure-holder who originally held his land on the condition of guarding the neighbouring hill passes (ghats), Bengal.

GHI, Ghee.—Clarified butter.

GINGELLY.—See TIL.

GODOWN.—A store room or warehouse. An Anglo-Indian word derived from the Malay 'gadang.'

GOPURAM.—A gateway, especially applied to the great temple gateways in Southern India.

GOSAIN, Goswami.—A (Hindu) devotee; lit. one who restrains his passions.

GOSHA.—Name in Southern India for 'caste women' lit. "one who sits in a corner" syn. parda.

GRAM.—A kind of pea, CICER ARIETINUM. In Southern India the pulse DOLICHOS BIFLORUS is known as horse gram.

GRANTHA-SAHEB.—Sikh holy book.

GUARANTEED.—(1) A class of Native State, in Central India; (2) A class of railways.

GUNJ.—The red seed with a black 'eye' of ABRUS PRECATORIUS, a common wild creeper; used as the official weight for minute quantities of opium 96th TOLA.

GUR, Goor—Crude sugar; syn. jaggery, Southern India; tanyet, Burma.

GURAL.—A Himalayan goat antelope, CEMAGORAL.

GURDWARA.—A Sikh Shrine.

GURU.—(1) A Hindu religious preceptors (2) a schoolmaster, Bengal.

HADIS.—Tradition of the Prophet.

HAFIZ.—Guardian., one who has Quran by heart.

HAJ.—Pilgrimage to Mecca.

HAJAM, HAJJAM.—A barber.

HAJI.—A Mahomedan who has performed the haj. He is entitled to dye his beard red.

HAKIM.—A native doctor practising the Mahomedan system of medicine.

HALALKHOR.—A sweeper or scavenger; lit. one to whom everything is lawful food.

HALI.—Current. Applied to coin of Native States, especially Hyderabad.

HAMAL.—(1) A porter or cooly, (2) a house ervant.

HEJIRA (HIJRAH)—The era dating from the flight of Mahomed to Mecca, June 20th, 622 A.D.

HEERA LAL.—"Diamond Ruby."

HILSA.—A kind of fish, CLUPEA ILISHA.

HOONDI, HUNDI.—A draft (banking.)

HOLKAR.—See "Gaekwar."

HTI.—An iron pinnacle placed on a pagoda in Burma.

HUKKA, HOOKAH.—The Indian tobacco pipe.

IDGAH.—An enclosed place outside a town where Mahomedan services are held on festivals known as the Id., etc.

INAM.—Lit. 'reward.' Hence land held revenue free or at a reduced rate, often subject to service. See DEVASTHAU, SARAMJAM, WATAN.

INUNDATION CANAL.—A channel taken off from a river at a comparatively high level, which conveys water only when the river is in flood.

JACK FRUIT.—Fruit of ARTOCARPUS INTEGRIFOLIA, ver. PHANAS.

JAGGERY, jagri.—Name in Southern India for crude sugar; syn. gur.

JAGIR.—An assignment of land, or of the revenue of land held by a Jagirdar.

JAH.—A term denoting dignity.

JAM (Sindhi or Baluch).—Chief.

JAPTI.—Distraint; attachment: corrupt of "Zabti."

JATHA.—An association.

JAZIRAT-UL-ARAB.—The Sacred Island of Arabia, including all the countries which contain cities sacred to the Mahomedans: Arabia, Palestine and Mesopotamia.

JEMADAR.—A native officer in the army or police.

JHIL.—A natural lake or swamp, Northern India; syn. bil, Eastern Bengal and Assam.

JIHAD.—A religious war undertaken by Musalmans.

JIRGA.—A council of tribal elders, North-West frontier.

JOGI. (YOGI).—A Hindu ascetic.

JOSHI.—Village astrologer.

JOWAR.—The large millet, a very common food-grain, ANDROPOGON SORGHUM, or SORGHUM VULGARE; syn. cholam and jola, in Southern India.

JUDI.—A revenue term in S. Division.

[illegible] COMMISSIONER.—An officer exercis- [illegible] of a High Court in the Central [illegible] and Sind.

[illegible].—An office or office build- [illegible] that of a Government official.

[illegible].—The straw of jowari (q. v.)— [illegible]

[illegible] Hindus to all [illegible]

[illegible] of ANACARDIUM [illegible] in the Konkan.

[illegible] CERVULUS MUNT- [illegible]

[illegible].—Barren land covered with [illegible], Northern India.

[illegible]

[illegible] of Shiva.

[illegible].—A waistcloth, or belt.

[illegible].—The wall of a large tent.

[illegible].—A kind of portable warming-pan, [illegible] by persons in Kashmir to keep them- [illegible] warm.

[illegible].—Nodular limestone, used for metal- [illegible] roads, as building stones or for preparation of lime.

[illegible].—A coarse grass which spreads and prevents cultivation especially in Bundelkhand, SACCHARUM SPONTANEUM.

[illegible].—A revenue Inspector.

[illegible].—A very venomous snake, BUN- [illegible] CAERULEUS.

[illegible].—A manager. Also Dewan in [illegible] States in Maharashtra and Gujarat.

[illegible].—Underground tunnels near the skirts [illegible] by which water is gradually led to the surface for irrigation, especially in Baluchistan.

[illegible].—A clerk or writer, Bombay.

KARMA.—The doctrine that existence is conditioned by the sum of the good and evil actions in past existences.

KARNAM.—See PATWARI.

[illegible].—A cartridge.

[illegible].—A butcher.

KAZI.—Better written *Qazi*—Under native rule, a judge administering Mahomedan law. Under British rule, the kazi registers marriages between Mahomedans and performs other functions, but has no powers conferred by law.

[illegible].—Beware.

KHADI (or KHADDER).—Cotton cloth hand-woven from hand-spun yarn.

KHALASI.—A native fireman, sailor, artilleryman, or tent-pitcher.

KHALSA.—Lit. 'pure.' (1) Applied especially to themselves by the Sikhs, the word Khalsa being equivalent to the Sikh community; (2) land directly under Government as opposed to land alienated to grantees, etc., Northern India.

KHAN.—Originally the ruler of a small Mohammedan State, now a nearly empty title though prized. It is very frequently used as a name, especially by Afghans and Pathans.

KHANDI, candy.—A weight especially used for cotton bales in Bombay, equivalent to 20 mds.

KHANSAMA.—A butler.

KHARAB.—In Bombay of any portion ran assessed survey No. which being uncultivable is left unassessed.

KHARIF.—Any crops sown just before or during the main S. W. monsoon.

KHAS.—Special, in Government hands. Khas tahasildar, the manager of a Government estate.

KHASADAR.—Local levies of foot soldiers, Afghanistan.

KHAS-KHAS, Kus-Kus.—A grass with scented roots, used for making screens which are placed in doorways and kept wet to cool a house by evaporation, ANDROPOGON SQUARROSUS.

KHEDDA, kheda.—A stockade into which wild elephants are driven; also applied to the operations for catching.

KHICHADI, kejjeree.—A dish of cooked rice and other ingredients, and by Anglo-Indians specially used of rice with fish.

KHILAT.—A robe of honour.

KHUTBA.—The weekly prayer for Mahomedans in general and for the reigning sovereign in particular.

KHWAJA.—A Persian word for "master," sometimes a name.

KINCOB, kamkhwab.—Silk textiles brocaded with gold or silver.

KIRPAN.—A Sikh religious emblem; a sword.

KODALI.—The implement like a hoe or mattock in common use for digging; syn. mamuti, Southern India.

KONKAN.—The narrow strip of low land between the Western ghats and the sea.

KOS.—A variable measure of distance usually estimated at about two miles. The distance between the kos-minars or milestones on the Mughal Imperial roads averages a little over 2 miles, 4 furlongs, 150 yards. Also means the leathern water-lift drawn by bullocks in Gujarat and Kathiawar.

KOT.—Battlements.

KOTHI.—A large house.

KOTWAL.—The head of the police in a town, under native rule. The term is still used in Hyderabad and other parts of India.

KOTWALI.—The chief police station in a head-quarters town.

KUCHA BANDI—A barrier or gateway erected across a lane.

KUFR.—Infidelity, unbelief in the Quran and the Prophet.

KULKARNI.—See PATWARI.

KUMBHAR.—A potter.

KUMBI.—An agriculturist (Kanbi in Gujarat Kurmi in N. India.)

KUNWAR OR KUMAR.—The heir of a Rajah (Every son of any chief in Gujarat and Kathiawar)

KURAN.—A big grass land growing grass fit for cutting.

KUSHTI (V), KUSTI (M).—Wrestling.

KYARI.—Land embanked to hold water for rice cultivation.

KYAUNG.—A Buddhist monastery, which always contains a school, Burma.

LAKH, lac.—A hundred thousand.

LAL.—A younger son of a Raja (strictly a 4th son, but see under "Babu").

LAMBARDAR.—The representative of the co-sharers in a zamindari village, Northern India.

LANGUR.—A large monkey, SEMNOPITHECUS ENTELLUS.

LASCAR, correct lashkar.—(1) an army, (2) in English usage a native Sailor.

LAT.—A monumental pillar.

LATERITE.—A vesicular material formed of disintegrated rock, used for buildings and making roads; also probably valuable for the production of aluminium. Laterite produces a deep brichord soil.

LINGAM.—The phallic emblem, worshipped as the representative of Shiva.

LITCHI.—A fruit tree grown in North India (LITCHI CHINENSIS).

LOKAMANYA.—(lit.) Esteemed of the world or the people; a national hero.

LOKENDRA OR LOKINDRA.—"Protector of the World," title of the Chiefs of Dholpur and Datia.

LONGYI.—A waistcloth, Burma.

LOTA.—A small brass water-pot.

LUNGI, loongi—A cloth (coloured dhoti simply wound round the waist.

MADRASA.—A school especially one for the higher instruction of Mahomedans.

MAHAJAN.—The guild by Hindu or Jain merchants in a city. The head of the Mahajan is the Nagarsheth (*q. v.*).

MAHAL.—(1) Formerly a considerable tract of country; (2) now a village or part of a village for which a separate agreement is taken for the payment of land revenue; (3) a department of revenue, *e.g.*, right to catch elephants, or to take stone; (4) in Bombay a small Taluka under a MAHALKARI.

MAHANT.—The head of a Hindu conventual establishment.

MAHARAJA.—The highest of hereditary rulers among the Hindus, or else a personal distinction conferred by Government. It has several variations as under "Raja" with the addition of MAHARAJ RANA; its feminine is MAHARANI (MAHA=great).

MAHATMA.—(lit.) A great soul; applied to men who have transcended the limitations of the flesh and the world.

MAHSEER, mahasir.—A large carp, BARBUS-TOR (lit. 'the big-headed').

MAHUA.—A tree, BASSIA LATIFOLIA, producing flowers used (when dried) as food or for distilling liquor, and seeds which furnish oil.

MAIDAN.—An open space of level ground; the park at Calcutta.

MAINA.—A bird.

MAJOR WORKS.—Irrigation works for which separate accounts are kept of capital, revenue, and interest.

MAJUR.—A labourer (in Bombay).

MAKTAB.—An elementary Mahomedan school.

MALGUZAR (revenue payer).—(1) The term applied in the Central Provinces to a co-sharer in a village held in ordinary proprietary tenure· (2) a cultivator in the Chamba State.

MALI.—A gardener.

MAKTA.—license, monopoly.

MAKTADAR.—A licensee, monopolist.

MALIK.—Master, proprietor.

MAMLATDAR.—The officer in charge of a taluka, Bombay, whose duties are both executive and magisterial; syn. tahasildar.

MANDAP, or mandapam.—A porch or pillared hall, especially of a temple.

MANGOSTEEN.—The fruit of GARCINIA MANGOSTANA.

MARKHOR.—A wild goat in North Western India, CAPRA FALCONERI.

MASJID.—A mosque. Jama Masjid, the principal mosque in a town, where worshippers collect on Fridays.

MASNAD.—Seat of state or throne, Mahomedan; syn. gaddi.

MATH.—A Hindu conventual establishment.

MAULANA.—A Mahomedan skilled in Arabic and religious knowledge.

MAULVI.—A person learned in Muhammadan law.

MAUND, ver. Man.—A weight varying in different localities. The Ry. maund is 80 lbs.

MAYA.—Sanskrit term for delusion.

MEHEL or MAHAL.—A palace.

MELA.—A religious festival or fair.

MIAN.—Title of the son of a Rajput Nawab resembling the Scottish "Master."

MIHRAB.—The niche in the centre of the western wall of a mosque.

MIMBAR.—Steps in a mosque, used as a pulpit

MINAR.—A pillar or tower.

MINOR WORKS.—Irrigation works for which regular accounts are not kept, except, in some cases, of capital.

MIR.—A leader, an inferior title which, like "Khan," has grown into a name, especially used by descendants of the Chiefs of Sind.

MIRZA.—If prefixed, "Mr." or "Esquire."

MISTRI.—(1) a foreman, (2) a cook.

MONG, MOUNG, OR MAUNG (Arakanese)—Leader.

CALENDAR FOR 1930.

January.

S.	...	5	12	19	26	...
M.	...	6	13	20	27	...
Tu.	...	7	14	21	28	...
W.	1	8	15	22	29	...
Th.	2	9	16	23	30	...
F.	3	10	17	24	31	...
S.	4	11	18	25		...

February.

S.	...	2	9	16	23	...
M.	...	3	10	17	24	...
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	...	6	13	20	27	...
F.	...	7	14	21	28	...
S.	1	8	15	22	...	...

March.

S.	...	2	9	16	23	30
M.	...	3	10	17	24	31
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	...	6	13	20	27	...
F.	...	7	14	21	28	...
S.	1	8	15	22	29	...

April.

S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	...	...
F.	4	11	18	25	...	..
S.	5	12	19	26	...	...

May.

S.	...	4	11	18	25	...
M.	...	5	12	19	26	...
Tu.	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th.	1	8	15	22	29	...
F.	2	9	16	23	30	...
S.	3	10	17	24	31	...

June.

S.	1	8	15	22	29	..
M.	2	9	16	23	30	...
Tu.	3	10	17	24	...	
W.	4	11	18	25	...	...
Th.	5	12	19	26	...	...
F.	6	13	20	27	...	...
S.	7	14	21	28	...	...

July.

S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	31	...
F.	4	11	18	25	...	...
S.	5	12	19	26	...	...

August.

S.	...	3	10	17	24	31
M.	...	4	11	18	25	...
Tu.	...	5	12	19	26	...
W.	...	6	13	20	27	...
Th.	...	7	14	21	28	...
F.	1	8	15	22	29	...
S.	2	9	16	23	30	...

September.

S.	...	7	14	21	28	...
M.	1	8	15	22	29	
Tu.	2	9	16	23	30	...
W.	3	10	17	24	...	...
Th.	4	11	18	25	...	...
F.	5	12	19	26	...	...
S.	6	13	20	27	...	...

October.

S.	...	5	12	19	26	...
M.	...	6	13	20	27	...
Tu.	...	7	14	21	28	...
W.	1	8	15	22	29	...
Th.	2	9	16	23	30	...
F.	3	10	17	24	31	...
S.	4	11	18	25	...	...

November.

S.	...	2	9	16	23	30
M.	...	3	10	17	24	...
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	...	6	13	20	27	...
F.	..	7	14	21	28	...
S.	1	8	15	22	29	...

December.

S.	...	7	14	21	28	...
M.	1	8	15	22	29	...
Tu.	2	9	16	23	30	...
W.	3	10	17	24	31	...
Th.	4	11	18	25	...	...
F.	5	12	19	26	...	...
S.	6	13	20	27	...	...

Preface to the XVI Annual Volume

OF THE

INDIAN YEAR BOOK, 1929.

THE Editors have to thank many correspondents who during the past year have sent them suggestions for the improvement of this book. The Indian Year Book is intended above all to be a book of reference, and its completeness and convenience of arrangement must necessarily depend to a great extent on the part taken in its editing by the members of the public who most use it.

The help extended to the Editors by various officials, and more particularly by the Indian Commercial Intelligence Department, has again been readily given and is most gratefully acknowledged. Without such help it would be impossible to produce the Year Book with up-to-date statistics.

Suggestions for the improvement or correction of the Year Book may be sent to the Editors at any time, but those which reach them before October have a better chance of being adopted than later suggestions which only reach them after the work of revision has been partly completed.

The Times of India, Bombay,
January, 1929.

An Indian Glossary.

ABKARI.—Excise of liquors and drugs.

ACHHUT.—Untouchable (Hindi) Asuddhar.

ADHIRAJ.—"Lord of the Lands:" added to "Raja," &c., it means "paramount."

AFSAR.—A corruption of the English "officer."

AHLUWALIA.—Name of a princely family resident at the village of Ahlu, near Lahore.

AIN.—A timber tree TERMINALIA TOMENTOSA.

AKALI.—Originally, a Sikh devotee, one of a band founded by Guru Govind Singh (who died 1708): now, a member of the politico-religious army (*dal*) of reforming Sikhs.

AKHARA.—A Hindu school of gymnastics.

AKHUNDZADA.—Son of a Head Officer.

ALIJAH.—Of exalted rank.

ALIGHOL.—Literally a Mahomedan circle. A kind of athletic club formed for purposes of self-defence.

ALI RAJA.—Sea King (Laccadives).

AM.—Mango.

AMIL.—A name given in Sind to educated members of the Lohana community, a Hindu caste consisting principally of bankers, clerks and minor officials.

AMIR (corruptly EMIR).—A Mohammedan Chief often also a personal name.

ANICUT.—A dam or weir across a river for irrigation purposes, Southern India.

ANJUMAN.—A communal gathering of Mahomedans.

APHUS.—Believed to be a corruption of ALPHONSE, the name of the best variety of Bombay mango.

ARZ, ARZI, ARZ-DASHT.—Written petition.

ASAF.—A minister.

ASPRISHYA.—Untouchable (Sanskrit).

AUS.—The early rice crop, Bengal, syn. Ahu, Assam.

AVATAR.—An incarnation of Vishnu.

AYURVEDA.—Hindu science of Medicine.

BABA.—Lit. "Father," a respectful "Mr." Irish "Your Honour."

BABU.—(1) A gentleman in Bengal, corresponding to Pant in the Deccan and Konkan. (2) Hence used by Anglo-Indians of a clerk or accountant. Strictly a 5th or still younger son of a Raja but often used of any son younger than the heir, whilst it has also grown into a term of address=Esquire. There are, however, one or two Rajas whose sons are known respectively as—1st, Kunwar; 2nd, Diwan; 3rd, Thakur; 4th, Lal; 5th Babu.

BABUL.—A common thorny tree, the bark of which is used for tanning, ACACIA ARABICA.

BADMASH.—A bad character: a rascal.

BAGH.—Tiger.

BAGHLA.—(1) A native boat (Buggalow). (2) The common pond heron or paddybird.

BAHADUR.—Lit. "brave" or "warrior"; a title used by both Hindus and Mohammedans, often bestowed by Government; added to other titles, it increases their honour but alone it designates an inferior ruler.

BAIRAGI.—A Hindu religious mendicant.

BAJRA OR BAJRI.—The bulrush millet, a common food-grain, PENNISETUM TYPHOIDEUM; syn. cambu, Madras.

BAKHSHI.—A revenue officer or magistrate.

BAND.—A dam or embankment (Bund).

BANYAN.—A species of fig-tree, FICUS BENGALENSIS.

BARSAT.—(1) A fall of rain, (2) the rainy season.

BASTI.—(1) A village, or collection of huts; (2) A Jain temple, Kanara.

BATTA.—Lit. 'discount' and hence allowances by way of compensation.

BAZAR.—(1) A street lined with shops, India proper; (2) a covered market, Burma.

BEGUM or BEGAM.—The feminine of "Nawab" combined in Bhopal as "Nawab Begum."

BER.—A thorny shrub bearing a fruit like a small plum, ZIZYPHUS JUJUBA.

BESAR.—Apparently a large landowner.

BEWAR.—Name in Central Provinces for shifting cultivation in jungles and hill-sides; syn. taungya, Burma; jhum, North-Eastern India.

BHADOI.—Early autumn crop, Northern India, reaped in the month Bhadon.

BHAGAT OR BHAKTA.—A devotee.

BHAG-BATAI.—System of payment of land revenue in kind.

BHAIBAND.—Relation or man of same caste or community.

BHANG.—The dried leaves of the hemp plant, CANNABIS SATIVA, a narcotic.

BHANWAR.—Light sandy soil; syn. bhur.

BHARAL.—A Himalayan wild sheep, OVIS NAHURA.

BHARAT.—India.

BHARATA-VARSHA.—India.

BHENDI.—A suculent vegetable (HIBISCUS ESCULENTUS).

BHONSLE.—Name of a Maratha dynasty.

BHUP.—Title of the ruler of Cooch Behar.

BHUGTI.—Name of a Baluch tribe.

BHUSA.—Chaff, for fodder.

BHUT.—The spirit of departed persons.

Note.—According to the Hunterian system of transliteration here adopted the vowels have the following values:—a either long as the a in 'father' or short as the u in 'cut,' e as the ai in 'gain,' i either short as the i in 'bib,' or long as the ee in 'feel,' o as the o in 'bone,' u either short as the oo in 'good,' or long as the oo in 'boot,' ai as the i in 'mile,' au as the ou in 'grouse.' This is only a rough guide. The vowel values vary in different parts of India in a marked degree.

BIDRI.—A class of ornamental metalwork, in which blackened pewter is inlaid with silver, named from the town of Bidar, Hyderabad.

BIGHA.—A measure of land varying widely; the standard bigha is generally five-eights of an acre.

BIR (BID).—A grassland—North India, Gujarat and Kathiawar.

BLACK COTTON SOIL.—A dark-coloured soil, very retentive of moisture, found in Central and Southern India.

BOARD OF REVENUE.—The chief controlling revenue authority in Bengal, the United Provinces and Madras.

BOR.—See BER.

BRINJAL.—A vegetable, SOLANUM MELONGENA; syn. egg-plant.

BUNDER, or bandar.—A harbour or port.

BURUJ.—A bastion in a line of battlements.

CADJAN.—Palm leaves used for thatch.

CHABUK.—A whip.

CHABUTRA.—A platform of mud or plastered brick, used for social gatherings, Northern India.

CHADAR.—A sheet worn as a shawl by men and sometimes by women. (Chudder.)

CHAITYA.—An ancient Buddhist chapel.

CHAMBHAR (CHAMAR).— A caste whose trade is to tan leather.

CHAMPAK.—A tree with fragrant blossoms MICHELIA CHAMPACA.

CHANA.—Gram.

CHAPATI.—A cake of unleavened breads (Chaupatti.)

CHAPRASI.—An orderly or messenger, Northern India; syn. pattawala, Bombay; peon, Madras.

CHARAS.—The resin of the hemp plant. CANNABIS SATIVA, used for smoking.

CHARKHA.—A spinning wheel.

CHARPAI (charpoy).—A bedstead with four legs, and tape stretched across the frame for a mattress.

CHAUDHRI.—Under native rule, a subordinate revenue official; at present the term is applied to the headman or representative of a trade guild.

CHAUKIDAR.—The village watchman and rural policeman.

CHAUTH.—The fourth part of the land revenue, exacted by the Marathas in subject territories.

CHAVR (CHORO, GUJARATI).—Village headquarters.

CHELA.—A pupil, usually in connexion with religious teaching.

CHHAONI.—A collection of thatched huts or barracks; hence a cantonment.

CHHATRAPATI.—One of sufficient dignity to have an umbrella carried over him.

CHHATRI.—(1) An umbrella, (2) domed building such as a cenotaph.

CHIEF COMMISSIONER.—The administrative head of one of the lesser Provinces in British India.

CHAIKOR.—A kind of partridge, CACCABIS CHUCAR.

CHIKU.—The Bombay name for the fruit of ACHRAS SAPOTA, the Sapodilla plum of the West Indies.

CHINAR.—A plane tree, PLATANUS ORIENTALIS.

CHINKARA.—The Indian gazelle, GAZELLA BENNETTI, often called 'ravine deer.'

CHITAL.—The spotted deer, CERVUS AXIS.

CHOLAM.—Name in Southern India for the large millet, ANDROPOGON SORGHUM; syn. jowar.

CHOLI.—A kind of short bodice worn by women.

CHOWRIE.—Fly-whisk.

CHUNAM, chuna.—Lime plaster.

CIRCLE.—The area in charge of—(1) A Conservator of forests; (2) A Postmaster or Deputy Postmaster-General; (3) A Superintending Engineer of the Public Works Department.

CIVIL SURGEON.—The officer in medical charge of a District.

COGNIZABLE.—An offence for which the culprit can be arrested by the police without a warrant.

COLLECTOR.—The administrative head of a District in Regulation Provinces corresponding to the Deputy Commissioner in non-regulation areas.

COMMISSIONER.—(1) The officer in charge of a Division or group of Districts; (2) the head of various departments, such as Stamps, Excise, etc.

COMPOUND.—The garden and open land attached to a house. An Anglo-Indian word perhaps derived from 'kumpan,' a hedge.

CONSERVATOR.—The Supervising Officer in charge of a Circle in the Forest Department.

COUNCIL BILLS.—Bills or telegraphic transfers drawn on the Indian Government by the Secretary of State in Council.

COUNT.—Cotton yarns are described as 20's, 30's, etc., counts when not more than a like number of hanks of 840 yards go to the pound avoirdupois.

COURT OF WARDS.—An establishment for managing estates of minors and other disqualified persons.

CRORE, karor.—Ten millions.

DADA.—Lit. "grandfather" (paternal); any venerable person. In Bombay slang a "hooligan boss."

DAFFADAR.—A non-commissioned native officer in the army or police.

DAFTAR.—Office records.

DAFTARI.—Record-keeper.

DAH OR DAO.—A cutting instrument with no point, used as a sword, and also as an axe, Assam and Burma.

DAK (dawk).—A stage on a stage coach route. Dawk bungalow is the travellers' bungalow maintained at such stages in days before railways came.

DAKAITI, DACOITY.—Robbery by five or more persons.

DAL.—A generic term applied to various pulses.

DAM.—An old copper coin, one-fortieth of a rupee.

DARBAR.—(1) A ceremonial assembly, especially one presided over by the Ruler of a State hence (2) the Government of a Native State.

DARGAH.—A Mahomedan shrine or tomb of a saint.

DARI, Dhurrie.—A rug or carpet, usually of cotton, but sometimes of wool.

DAROGHA.—The title of officials in various departments; now especially applied to subordinate controlling Officers in the Police and Jail Departments.

DARWAN.—A door-keeper.

DARWAZA.—A gateway.

DAULA AND DAULAT.—State.

DEB.—A Brahminical priestly title; taken from the name of a divinity.

DEBOTTAR.—Land assigned for the upkeep of temples or maintenance of Hindu worship.

DEODAR.—A cedar, CEDRUS LIBANI or C. DEODARA.

DEPUTY COMMISSIONER.—The Administrative head of a District in non-regulation areas corresponding to the Collector in Regulation Provinces.

DEPUTY MAGISTRATE AND COLLECTOR.—A subordinate of the Collector, having executive and judicial (revenue and criminal) powers; equivalent to Extra Assistant Commissioner in non-regulation areas.

DESAI.—A revenue official under native (Maratha) rule.

DESH.—(1) Native country; (2) the plains as opposed to the hills, Northern India; (3) the plateau of the Deccan above the Ghats.

DESHMUKH.—A petty official under native (Maratha) rule.

DEVA.—A deity.

DEVADASI.—A girl dedicated to temple or God.

DEVASTHAN.—Land assigned for the upkeep of a temple or other religious foundation.

DEWAN.—See DIWAN.

DHAK.—A tree, BUTEA FRONDOSA, with brilliant orange-scarlet flowers used for dyeing, and also producing a gum; syn. palas, Bengal and Bombay; Chhiul, Central India.

DHAMANI.- A heavy shighram or tonga drawn by bullocks.

DHARMSALA.—A charitable institution provided as a resting-place for pilgrims or travellers, Northern India.

DHATURA.—A stupefying drug, DATURA AFSTUOSA.

DHENKLI.—Name in Northern India for the lever used in raising water; syn. picottah.

DHOBI.—A washerman.

DHOTI.—The loincloth worn by men.

DISTRICT.—The most important administrative unit of area.

DIVISION.—(1) A group of districts for administrative and revenue purposes, under a Commissioner; (2) the area in charge of a Deputy Conservator of Forests, usually corresponding with a (revenue) District; (3) the area under a Superintendent of Post Offices; (4) a group of (revenue) districts under an Executive Engineer of the Public Works Department.

DIWAN.—A Vizier or other First Minister to a native Chief, either Hindu or Mohammedan, and equal in rank with "Sardar" under which see other equivalents. The term is also used of a Council of State.

DIWAN (SIKH).—Communal Gathering.

DIWANI.—Civil, especially revenue, administration; now used generally in Northern India of civil justice and Courts.

DOAB.—The tract between two rivers, especially that between the Ganges and Jumna.

DOM.—Untouchable caste in Northern India.

DRY CROP.—A crop grown without artificial irrigation.

DRY RATE.—The rate of revenue for unirrigated land.

DUN.—A valley, Northern India.

EKKA.—A small two-wheeled conveyance drawn by a pony, Northern India.

ELCHI, ELACHI.—Cardamom.

ELAYA RAJA.—Title given to the heir of the Maharaja of Travancore.

EXTRA ASSISTANT COMMISSIONER.—See Deputy Magistrate and Collector.

FAKIR.—Properly an Islamic mendicant or a mendicant who has no creed, but often loosely used of Hindu mendicants also.

FAMINE INSURANCE GRANT.—An annual provision from revenue to meet direct famine expenditure, or the cost of certain classes of public works, or to avoid debt.

FARMAN.—An imperial (Mughal) order or grant.

FARZAND (with defining words added)—"Favorite" or "beloved."

FASLI.—Era solar started by Akbar, A.C. minus 572-3.

FATEH.—"Victory."

FATEH JEANG.—"Victorious in Battle" (a title of the Nizam).

FATWA.—Judicial decree or written opinion of a doctor of Muslim law.

FAUJDARI.—Relating to a criminal court; criminal proceedings.

FAUJDARI.—Under native rule, the area under a Faujdar or subordinate governor; now used generally of Magistrates' Criminal Courts.

FINANCIAL COMMISSIONER.—The chief controlling revenue authority in the Punjab, Burma and the Central Provinces.

FITTON GARI.—A phæton, Bombay. Derived from the English.

GADDI, Gadi.—The cushion or throne of (Hindu) royalty.

GAEKWAR (sometimes GUICOWAR).—Title with "Maharaja" added of the ruler of Baroda. It was once a caste name and means "cowherd," *i.e.*, the protector of the sacred animal; but later on, in common with "Holkar" and "Sindhia," it came to be a dynastic appellation and consequently regarded as a title. Thus, a Prince becomes "Gaekwar" on succeeding to the estate of Baroda; "Holkar," to that of Indore and "Sindhia," to that of Gwalior.

GANJA.—The unfertilised flowers of the cultivated female hemp plant, CANNABIS SATIVA, used for smoking.

GAUR.—Wild cattle, commonly called 'bison' BOS GAURUS.

GAYAL.—A species of wild cattle, BOS FRONTALIS, domesticated on the North-East Frontier; syn. mithan.

GHADR.—Mutiny, Revolution.

GHARRIE (GARI).—A carriage, cart.

GHAT, Ghaut.—(1) A landing-place on a river; (2) the bathing steps on the bank of a tank; (3) a pass up a mountain; (4) in European usage, a mountain range. In the last sense especially applied to the Eastern and Western Ghats.

GHATWAL.—A tenure-holder who originally held his land on the condition of guarding the neighbouring hill passes (ghats), Bengal.

GHI, Ghee.—Clarified butter.

GINGELLY.—See TIL.

GODOWN.—A store room or warehouse. An Anglo-Indian word derived from the Malay 'gadang.'

GOPURAM.—A gateway, especially applied to the great temple gateways in Southern India.

GOSAIN, Goswami.—A (Hindu) devotee; lit. one who restrains his passions.

GOSHA.—Name in Southern India for 'caste women' lit. "one who sits in a corner" syn. parda.

GRAM.—A kind of pea, CICER ARIETINUM. In Southern India the pulse DOLICHOS BIFLORUS is known as horse gram.

GRANTHA-SAHEB.—Sikh holy book.

GUARANTEED.—(1) A class of Native State, in Central India; (2) A class of railways.

GUNJ.—The red seed with a black 'eye' of ABRUS PRECATORIUS, a common wild creeper; used as the official weight for minute quantities of opium 96th TOLA.

GUR, Goor—Crude sugar; syn. jaggery, Southern India; tanyet, Burma.

GURAL.—A Himalayan goat antelope, CEMAGORAL.

GURDWARA.—A Sikh Shrine.

GURU.—(1) A Hindu religious preceptors (2) a schoolmaster, Bengal.

HADIS.—Tradition of the Prophet.

HAFIZ.—Guardian., one who has Quran by heart.

HAJ.—Pilgrimage to Mecca.

HAJAM, HAJJAM.—A barber.

HAJI.—A Mahomedan who has performed the haj. He is entitled to dye his beard red.

HAKIM.—A native doctor practising the Mahomedan system of medicine.

HALALKHOR.—A sweeper or scavenger; lit. one to whom everything is lawful food.

HALI.—Current. Applied to coin of Native States, especially Hyderabad.

HAMAL.—(1) A porter or cooly, (2) a house servant.

HEJIRA (HIJRAH)—The era dating from the flight of Mahomed to Mecca, June 20th, 622 A.D.

HEERA LAL.—"Diamond Ruby."

HILSA.—A kind of fish, CLUPEA ILISHA.

HOONDI, HUNDI.—A draft (banking.)

HOLKAR.—See "Gaekwar."

HTI.—An iron pinnacle placed on a pagoda in Burma.

HUKKA, HOOKAH.—The Indian tobacco pipe.

IDGAH.—An enclosed place outside a town where Mahomedan services are held on festivals known as the Id., etc.

INAM.—Lit. 'reward.' Hence land held revenue free or at a reduced rate, often subject to service. See DEVASTHAU, SARAMJAM, WATAN.

INUNDATION CANAL.—A channel taken off from a river at a comparatively high level, which conveys water only when the river is in flood.

JACK FRUIT.—Fruit of ARTOCARPUS INTEGRIFOLIA, ver. PHANAS.

JAGGERY, jagri.—Name in Southern India for crude sugar; syn. gur.

JAGIR.—An assignment of land, or of the revenue of land held by a Jagirdar.

JAH.—A term denoting dignity.

JAM (Sindhi or Baluch).—Chief.

JAPTI.—Distraint; attachment: corrupt of "Zabti."

JATHA.—An association.

JAZIRAT-UL-ARAB.—The Sacred Island of Arabia, including all the countries which contain cities sacred to the Mahomedans: Arabia, Palestine and Mesopotamia.

JEMADAR.—A native officer in the army or police.

JHIL.—A natural lake or swamp, Northern India; syn. bil, Eastern Bengal and Assam.

JIHAD.—A religious war undertaken by Musalmans.

JIRGA.—A council of tribal elders, North-West frontier.

JOGI. (YOGI).—A Hindu ascetic.

JOSHI.—Village astrologer.

JOWAR.—The large millet, a very common food-grain, ANDROPOGON SORGHUM, or SORGHUM VULGARE; syn. cholam and jola, in Southern India.

JUDI.—A revenue term in S. Division.

JUDICIAL COMMISSIONER.—An officer exercising the functions of a High Court in the Central Provinces, Oudh, and Sind.

KACHERI, kachahri.—An office or office building, especially that of a Government official.

KADAB, karbi.—The straw of jowari (q. v.)—a valuable fodder.

KAFIR.—Infidel, applied by Muslims to all non-Muslims.

KAJU, kashew.—The nut of ANACARDIUM OCCIDENTALE, largely grown in the Konkan.

KAKAR.—The barking deer, CERVULUS MUNTJAC.

KALAR, kallar.—Barren land covered with salt or alkaline efflorescences, Northern India.

KALI-YUGA.—
KALI.— } The Iron age.

KALI.—Popular goddess, consort of Shiva.

KALI.—Black soil.

KAMARBAND, Cummerbund.—A waistcloth, or belt.

KANAT.—The wall of a large tent.

KANGAR.—A kind of portable warming-pan, carried by persons in Kashmir to keep themselves warm.

KANKAR.—Nodular limestone, used for metalling roads, as building stones or for preparation of lime.

KANS.—A coarse glass which spreads and prevents cultivation especially in Bundelkhand, SACCHARUM SPONTANEUM.

KANUNGO.—A revenue Inspector.

KARAIT.—A very venomous snake, BUNGARUS CANDIDUS or CAERULEUS.

KARBHARI.—A manager. Also Dewan in Smaller states in Maharashtra and Gujarat.

KAREZ.—Underground tunnels near the skirts of hills, by which water is gradually led to the surface for irrigation, especially in Baluchistan.

KARKUN.—A clerk or writer, Bombay.

KARMA.—The doctrine that existence is conditioned by the sum of the good and evil actions in past existences.

KARNAM.—See PATWARI.

KARTOOS.—A Cartridge.

KASAI.—A butcher.

KAZI.—Better written *Qazi*—Under native rule, a judge administering Mahomedan law. Under British rule, the kazi registers marriages between Mahomedans and performs other functions, but has no powers conferred by law.

KHABARDAR.—Beware.

KHADI (or KHADDER).—Cotton cloth handwoven from hand-spun yarn.

KHALASI.—A native fireman, sailor, artilleryman, or tent-pitcher.

KHALSA.—Lit. 'pure.' (1) Applied especially to themselves by the Sikhs, the word Khalsa being equivalent to the Sikh community; (2) land directly under Government as opposed to land alienated to grantees, etc., Northern India.

KHAN.—Originally the ruler of a small Mohammedan State, now a nearly empty title though prized. It is very frequently used as a name, especially by Afghans and Pathans.

KHANDI, candy.—A weight especially used for cotton bales in Bombay, equivalent to 20 mds.

KHANSAMA.—A butler.

KHARAB.—In Bombay of any portion ran assessed survey No. which being uncultivable is left unassessed.

KHARIF.—Any crops sown just before or during the main S. W. monsoon.

KHAS.—Special, in Government hands. Khas tahasildar, the manager of a Government estate.

KHASADAR.—Local levies of foot soldiers, Afghanistan.

KHAS-KHAS, Kus-Kus.—A grass with scented roots, used for making screens which are placed in doorways and kept wet to cool a house by evaporation, ANDROPOGON SQUARROSUS.

KHEDDA, kheda.—A stockade into which wild elephants are driven; also applied to the operations for catching.

KHICHADI, kejjeree.—A dish of cooked rice and other ingredients, and by Anglo-Indians specially used of rice with fish.

KHILAT.—A robe of honour.

KHUTBA.—The weekly prayer for Mahomedans in general and for the reigning sovereign in particular.

KHWAJA.—A Persian word for "master," sometimes a name.

KINCOB, kamkhwab.—Silk textiles brocaded with gold or silver.

KIRPAN.—A Sikh religious emblem; a sword.

KODALI.—The implement like a hoe or mattock in common use for digging; syn. mamuti, Southern India.

KONKAN.—The narrow strip of low land between the Western ghats and the sea.

KOS.—A variable measure of distance usually estimated at about two miles. The distance between the kos-minars or milestones on the Mughal Imperial roads averages a little over 2 miles, 4 furlongs, 150 yards. Also means the leathern water-lift drawn by bullocks in Gujarat and Kathiawar.

KOT.—Battlements.

KOTHI.—A large house.

KOTWAL.—The head of the police in a town, under native rule. The term is still used in Hyderabad and other parts of India.

KOTWALI.—The chief police station in a head-quarters town.

KUCHA BANDI—A barrier or gateway erected across a lane.

KUFR.—Infidelity, unbelief in the Quran and the Prophet.

KULKARNI.—See PATWARI.

KUMBHAR.—A potter.

KUMBI.—An agriculturist (Kanbi in Gujarat Kurmi in N. India.)

KUNWAR OR KUMAR.—The heir of a Rajah (Every son of any chief in Gujarat and Kathiawar)

KURAN.—A big grass land growing grass fit for cutting.

KUSHTI (V), KUSTI (M).—Wrestling.

KYARI.—Land embanked to hold water for rice cultivation.

KYAUNG.—A Buddhist monastery, which always contains a school, Burma.

LAKH, lac.—A hundred thousand.

LAL.—A younger son of a Raja (strictly a 4th son, but see under "Babu").

LAMBARDAR.—The representative of the co-sharers in a zamindari village, Northern India.

LANGUR.—A large monkey, SEMNOPITHECUS ENTELLUS.

LASCAR, correct lashkar.—(1) an army, (2) in English usage a native Sailor.

LAT.—A monumental pillar.

LATERITE.—A vesicular material formed of disintegrated rock, used for buildings and making roads; also probably valuable for the production of aluminium. Laterite produces a deep brichord soil.

LINGAM.—The phallic emblem, worshipped as the representative of Shiva.

LITCHI.—A fruit tree grown in North India (LITCHI CHINENSIS).

LOKAMANYA.—(lit.) Esteemed of the world or the people; a national hero.

LOKENDRA OR LOKINDRA.—"Protector of the World," title of the Chiefs of Dholpur and Datia.

LONGYI.—A waistcloth, Burma.

LOTA.—A small brass water-pot.

LUNGI, loongi—A cloth (coloured dhoti simply wound round the waist.

MADRASA.—A school especially one for the higher instruction of Mahomedans.

MAHAJAN.—The guild by Hindu or Jain merchants in a city. The head of the Mahajan is the Nagarsheth (*q. v.*).

MAHAL.—(1) Formerly a considerable tract of country; (2) now a village or part of a village for which a separate agreement is taken for the payment of land revenue; (3) a department of revenue, *e.g.*, right to catch elephants, or to take stone; (4) in Bombay a small Taluka under a MAHALKARI.

MAHANT.—The head of a Hindu conventual establishment.

MAHARAJA.—The highest of hereditary rulers among the Hindus, or else a personal distinction conferred by Government. It has several variations as under "Raja" with the addition of MAHARAJ RANA; its feminine is MAHARANI (MAHA=great).

MAHATMA.—(lit.) A great soul; applied to men who have transcended the limitations of the flesh and the world.

MAHSEER, mahasir.—A large carp, BARBUS TOR (lit. 'the big-headed').

MAHUA.—A tree, BASSIA LATIFOLIA, producing flowers used (when dried) as food or for distilling liquor, and seeds which furnish oil.

MAIDAN.—An open space of level ground; the park at Calcutta.

MAINA.—A bird.

MAJOR WORKS.—Irrigation works for which separate accounts are kept of capital, revenue, and interest.

MAJUR.—A labourer (in Bombay).

MAKTAB.—An elementary Mahomedan school.

MALGUZAR (revenue payer).—(1) The term applied in the Central Provinces to a co-sharer in a village held in ordinary proprietary tenure· (2) a cultivator in the Chamba State.

MALI.—A gardener.

MAKTA.—license, monopoly.

MAKTADAR.—A licensee, monopolist.

MALIK.—Master, proprietor.

MAMLATDAR.—The officer in charge of a taluka, Bombay, whose duties are both executive and magisterial; syn. tahasildar.

MANDAP, or mandapam.—A porch or pillared hall, especially of a temple.

MANGOSTEEN.—The fruit of GARCINIA MANGOSTANA.

MARKHOR.—A wild goat in North Western India, CAPRA FALCONERI.

MASJID.—A mosque. Jama Masjid, the principal mosque in a town, where worshippers collect on Fridays.

MASNAD.—Seat of state or throne, Mahomedan; syn. gaddi.

MATH.—A Hindu conventual establishment.

MAULANA.—A Mahomedan skilled in Arabic and religious knowledge.

MAULVI.—A person learned in Muhammadan law.

MAUND, ver. Man.—A weight varying in different localities. The Ry. maund is 80 lbs.

MAYA.—Sanskrit term for delusion.

MEHEL or MAHAL.—A palace.

MELA.—A religious festival or fair.

MIAN.—Title of the son of a Rajput Nawab resembling the Scottish "Master."

MIHRAB.—The niche in the centre of the western wall of a mosque.

MIMBAR.—Steps in a mosque, used as a pulpit

MINAR.—A pillar or tower.

MINOR WORKS.—Irrigation works for which regular accounts are not kept, except, in some cases, of capital.

MIR.—A leader, an inferior title which, like "Khan," has grown into a name, especially used by descendants of the Chiefs of Sind.

MIRZA.—If prefixed, "Mr." or "Esquire."

MISTRI.—(1) a foreman, (2) a cook.

MONG, MOUNG, OR MAUNG (Arakanese)—Leader.

MONSOON.—Lit. 'season,' and specifically (1) The S. W. Monsoon, which is a Northward extension of the S. E. trades, which in the Northern Summer cross the equator and circulate into and around the low pressure area over North India, caused by the excessive heating of the land area, and (2) The N. E. monsoon, which is the current of cold winds blowing down during the Northern winter from the cold land areas of Central Asia, giving rain in India only in S. E. Madras and Ceylon through moisture acquired in crossing the Bay of Bengal, and passing across the equator into the low pressure areas of the Australasian Southern summit.

MOPLAH (Mappila).—A fanatical Mahomedan sect in Malabar.

MOULVI OR MAULVI.—A learned Musalman or Muslim teacher.

MUDALIYAR OR MUD-LIAR.—A personal proper name, but implying "steward of the lands."

MUFASSAL, mofussil.—The outlying parts of a District, Province or Presidency, as distinguished from the head-quarters (Sadr).

MUKADAM.—Chief, leader; in Bombay, leader of coolie gang; also one employed by a merchant to superintend landing or shipment of goods.

MUKHTAR (corruptly mukhtiar).—(1) A legal practitioner who has not got a sanad and therefore cannot appear in court as of right; (2) any person holding a power of attorney on behalf of another person.

MUKHTIARKAR.—The officer in charge of a taluka, Sind, whose duties are both executive and magisterial; syn. tahasildar.

MUKTI, 'release.'—The perfect rest attained by the last death and the final reabsorption of the individual soul into the world—soul, syn. NIRVANA, MOKSHA.

MUMTAZ-UD-DAULA.—Distinguished in the State MULK, in the country.

MUNG, mug.—A pulse, PHASEOLUS RADIATUS: syn. mag. Gujarat.

MUNJ.—(1) A tall grass (SACCHARUM MUNJA in North India, from which mats are woven, and the Brahman sacred thread worn; (2) the said thread.

MUNSHI.—A teacher of Hindustani or any Perso-Arabian language. President or presiding official. Also Secretary or writer.

MUNSIF.—Judge of the lowest Court with civil jurisdiction.

MURLI (DEVADASI).—A girl dedicated to a God or temple.

MURUM, moorum.—Gravel, used for metalling roads.

MYOWUN.—"Mr."

NACHANI-NAGLI—See RAGI.

NAGARKHANA, Nakkarkhana.—A place where drums are beaten.

NAGARSHETH.—The head of the trading guild of Hindu and Jain merchants in a city.

NAIB.—Assistant or Deputy.

NAIK.—A leader, hence (1) a local chieftain in Southern India; (2) a native officer of the lowest rank (corporal) in the Indian army. (In Bombay, a head peon.)

NAT.—A demon or spirit, Burma.

NAWAB.—A title borne by Musalmans, corresponding roughly to that of Raja among Hindus. Originally a Viceroy under the Moghal Government, now the regular leading title of a Mohammedan Prince, corresponding to "Maharaja" of the Hindus.

NAZAR, nazarana.—A due paid on succession or on certain ceremonial occasions.

NAZIM.—Superintendent or Manager.

NET ASSETS.—(1) In Northern India, the rent or share of the gross produce of land taken by the landlord; (2) in Madras and Lower Burma, the difference between the assumed value of the crop and the estimate of its cost of production.

NEWAR.—Broad cockney woven across bedsteads instead of iron slats.

NGAPI.—Pressed fish or salted fish paste largely made and consumed in Burma.

NILGAI.—An antelope, BOSELAPHUS TRAGO CAMELUS.

NIM, neem.—A tree, MELIA AZADIRACHTA, the berries of which are used in dyeing.

NIRVANA.—See MUKTI.

NIKAH.—Muslim legal marriage.

NIZAM.—The title of the ruler of Hyderabad, the one Mohammedan Prince superior to Nawab.

NIZAMAT.—A sub-division of a Native State, corresponding to a British District, chiefly in the Punjab and Bhopal.

NON-AGRICULTURAL ASSESSMENT.—Enhanced assessment imposed when land already assessed as agricultural is diverted to use as a building site or for industrial concerns.

NON-COGNIZABLE.—An offence for which the culprit cannot be arrested by the police without a warrant.

NONO (Thibetan).—The ruler of Spitta.

NON-OCCUPANCY TENANTS.—A class of tenants with few statutory rights, except in Oudh beyond the terms in their leases or agreements.

NON-REGULATION.—A term formerly applied to certain Provinces to show that the regulations of full code of legislation was not in force in them.

NULLAH, NALA.—A ravine, watercourse, or drain.

OCCUPANCY TENANTS.—A class of tenants with special rights in Central Provinces, in United Provinces.

PADAUK.—A well known Burmese tree (PTEROCARPUS sp.) from the behaviour of which the arrival of the monsoon is prognosticated.

PADDY.—Unhusked rice.

PAGA.—A troop of horses among the Marathas.

PAGI.—A tracker of thieves of strayed or stolen animals.

PAHAR.—A mountain.

PAIGAH.—A tenure in Hyderabad State.

PAIK.—(1) A foot soldier; (2) in Assam formerly applied to every free male above sixteen years.

PAILI.—A grain measure.

PAILWAN, PAHLWAN.—Professional Wrestler.

PAIREE.—The name of the second best variety of Bombay mango, distinguishable from the APHUS (*q. v.*) by its pointed tip, and by the colour being less yellow and more green and red.

PAKKA, PUCCA.—Ripe, mature, complete.

PALAS.—See DHAK.

PALKI.—A palanquin or litter.

PAN.—The betel vine, PIPE BETLE.

PANCHAMA.—Low caste, Southern India.

PANCHAYAT.—(1) A committee for management of the affairs of a caste, village, or town; (2) arbitrators. Theoretically the panchayat has five (panch) members.

PANDA.—A Hindu priest, especially at holy places.

PANDIT.—A Hindu title, strictly speaking applied to a person versed in the Hindu scriptures, but commonly used by Brahmans. In Assam applied to a grade of Inspectors of primary schools.

PANSUPARI.—Distribution of PAN and SUPARI (*q. v.*) as a form of ceremonial hospitality.

PARAB.—A public place for the distribution of water, maintained by charity.

PARABADI.—A platform with a smaller platform like a dovecot on a centre pole or pillar built and endowed or maintained by charity, where grain is put every day for animals and birds.

PARDA, purdah.—(1) A veil or curtain; (2) the practice of keeping women secluded; syn. gosha.

PARDANASHIN.—Women who observe purdah.

PARDESI.—Foreign. Used in Bombay especially of Hindu servants, syces, &c., from North India.

PARGANA.—Fiscal area or petty sub-division of a tahsil Northern India.

PASHM.—The fine wool of the Tibetan goat.

PASHTO, PUSHTO.—Language of the Pathans.

PASO.—A waistcloth.

PAT, put.—A stretch of firm, hard clay.

PATEL.—A village headman, Central and Western India; syn. reddi, Southern India, gaonbura. Assam; padhan. Northern and Eastern India; Mukhi, Guzarat. (Patil in Maharashtra.)

PATIDAR.—A co-sharer in a village, Gujarat.

PATTAWALLA.—See CHAPRASI.

PATWARI.—A village accountant; syn. karnam, Madras; kulkarni, Bombay Deccan; talati, Gujarat; shanbhog, Mysore, Kanara and Coorg; mandal, Assam; tapedar, Sind.

PEON.—See CHAPRASI.

PESHKAR.—One who brings forward, submits papers, etc., personal clerk.

PESHKASH.—A tribute or offering to a superior.

PESHKUP.—Manager or agent.

PILAO (pulav).—A dish of rice and other ingredients, and by Anglo-Indians specifically used of chicken with rice and spices.

PHULKARI.—An embroidered sheet; lit. flower-work.

PICE, paisa.—A copper or bronze coin worth one farthing; also used as a generic term for money.

PICOTTAH.—A lever for raising water in a bucket for irrigation, Southern India; syn. dhenkul or dhenkuli, or dhikli, Northern India.

PIPAL.—A sacred tree, FICUS RELIGIOSA.

PIR.—A Mahomedan religious teacher or saint

PLEADER.—A class of legal practitioner.

PONGYI.—A Buddhist monk or priest, Burma.

POSTIN, posh-teen.—A coat or rug of sheepskin tanned with the wool on, Afghanistan.

PRANT.—An administrative sub-division in Maratha States, corresponding to a British District (Baroda) or Division (Gwalior); also in Kathiawar.

PRESIDENCY.—A former Division of British India.

PRINCE.—Term used in English courtesy for "Shahzada," but specially conferred in the case of "Prince of Arcot" (called also "Armin-i-Arcot").

PROTECTED.—Forests over which a considerable degree of supervision is exercised, but less than in the case of 'reserved' forests.

PROVINCE.—One of the large Divisions of British India.

PUJA.—Worship, Hindu.

PUJARI.—The priest attached to a temple.

PUNDIT.—See Pandit.

PURANA.—Lit. 'old' Sanskrit (1) applied to certain Hindu religious books, (2) to a geological 'group'; (3) also to 'punch-marked' coins.

PUROHIT—A domestic chaplain or spiritual guide, Hindu.

PWE.—An entertainment, Burma.

PYALIS—Bands of revellers who accompany the Muharram processions.

QILLA.—A Fort.

RABI.—Any crop sown after the main South-West monsoon.

RAGI (ELEUSINE COROCANA).—A small millet used as a food-grain in Western and Southern India; syn. marua, Nagli Nachni.

RAIL-GARI.—Railway train.

RAJA.—A Hindu Prince of exalted rank, but inferior to "Maharaja". The feminine of *Rani* (Princess or Queen), and it has the variations *Raj, Rana, Rao, Rai, Rawal, Rawat, Raikwar, Raikbar* and *Raikat*. The form *Rai* is common in Bengal, *Rao* in S. & W. India.

RAJ RAJESHWAR.—King of Kings.

RAMOSHI.—A caste whose work is watch and ward in the village lands and hence used for any chaukidar (*q. v.*) Actually a criminal tribe in Maharashtra.

RANA.—A title borne by some Rajput chiefs, equivalent to that of Raja.

RANI.—The wife or widow of a Raja.

RAUZA.—Mausoleum, shrine.

RAO.—A title borne by Hindus, either equivalent to, or ranking below, that of Raja.

REGAR.—Name for a black soil in Central and Southern India, which is very retentive of moisture, and suitable for growing cotton.

REGULATION.—A term formerly applied to certain provinces to show that the Regulations or full code of legislation applied to them.

REH.—Saline or alkaline efflorescences on the surface of the soil. Northern India.

RESERVED.—Forests intended to be maintained permanently.

RICKSHAW.—A one or two seat vehicle on two wheels drawn by coolies, used in the hills.

RISALDAR.—Commander of a troop of horses.

ROHI-ROZ.—Nilgai.

ROHU.—A kind of fish, LABEO ROHITA.

ROTI.—Bread.

ROZA.—Muslim fast during Ramazan.

RYOTWARI.—The system of tenure in which land revenue is imposed on the actual occupants of holdings.

SADHU.—A Hindu Ascetic.

SADR, sudder.—Chief (adjective). Hence the headquarters of a District; formerly applied to the Appellate Courts.

SAFA JANG—A long-handled battleaxe carried by Jat Sikhs.

SAFFLOWER.—A thistle which yields a yellow dye from its petals and oil from its seeds (CARTHAMUS TINCTORIUS), ver. kardai, kushanti.

SAHEB.—The Native Hindu term used to or of a European ("Mr. Smith" would be mentioned as "Smith Saheb" and his wife "Smith Mem-Saheb," but in addressing it would be "Saheb," fem. "Saheba," without the name); occasionally appended to a title in the same way as "Bahadur," but inferior (=master). The unusual combination "Nawab Saheb" implies a mixed population of Hindus and Mohammedans.

SAHIBZADA.—Son of a person of consequence.

SAID, SAYID, SAIYID, SIDI, SYED, SYUD—Various forms for a title adopted by those who claim direct male descent from Mohammed's grandson Husain.

SAL.—A useful timber tree in Northern India SHOREA ROBUSTA.

SAMBAR.—A deer, CERVUS UNICOLOR; syn. sarau.

SAN.—Bombay hemp, CROTALARIA JUNCEA.

SANAD—(1) A charter or grant, giving its name to a class of States in Central India held under a sanad, (2) any kind of deed of grants.

SANGATHAN.—Literally tying together. A movement which aims at unity and the knowledge of the art of self-defence among Hindus. Roughly similar to Fasciemo.

SANNYASI.—A Hindu mendicant.

SARI.—A long piece of cloth worn by women as a shawl.

SARANJAM.—Land held revenue free or on a reduced quit-rent in consideration of political services rendered by the holder's ancestors originally feudal tenure land for maintaining troops.

SARDAR (corrupted to SIRDAR).—A leading Government official, either civil or military, even a Grand Vizier. Nearly all the Punjab Barons bear this title. It and "Diwan" are like in value and used by both Hindus and Mohammedans. So, but Mohammedans only, are "Wali," "Sultan," "Amir," "Mir," "Mirza," "Mian," and "Khan."

SARKAR.—(1) The Government; (2) a tract of territory under Muhammadan rule, corresponding roughly to a Division under British administration.

SARSUBAH.—An officer in charge of a Division in the Baroda State corresponding to Commissioner of British territories.

SATI.—Suicide by a widow, especially on the funeral pyre of her husband.

SAHUKAR, SAUKAR, SOWKAR.—Banker, dealer in money, exchange etc.; money lender.

SATYAGRAHA.—(lit.) One possessed by the truth; one who follows the truth wherever it may lead. (Commonly used to denote the passive resistance movement.)

SATTA.—Speculation.

SAUDAGAR.—Merchant.

SAWAI.—A Hindu title implying a slight distinction (lit. one-fourth better than others).

SAWBWA.—A title borne by chiefs in the Shan States, Burma.

SEMAL or cotton tree.—A large forest tree with crimson flowers and pods containing a quantity of floss, BOMBAY MALABARICUM.

SEROW, sarau.—A goat antelope, NEMORHAEDUS BUBALINUS.

SETH, SHETH.—Merchant, banker.

SETTLEMENT.—(1) The preparation of a cadastral record, and the fixing of the Government revenue from land; (2) the local inquiry made before Forest Reserves are created; (3) the financial arrangement between the Government of India and Local Governments.

SHAHID—A martyr.

SHAHZADA.—Son of a King.

SHAIKH or SHEIKH (Arabic)—A chief.

SHAMS-UL-ULAMA.—A Mohammedan title denoting "learned."

SHAMSHER-JANG.—"Sword of Battle" (a title of the Maharaja of Travancore.)

SHANBHOG.—See PATWARI.

SHASTRAS.—The religious law-books of the Hindus.

SHEGADI, seggaree.—A pan on 3 feet with live charcoal in it.

SHER, ser, seer—A weight, or measure varying much in size in different parts of the country. The Railway ser is about 2 lbs.

SHETH, shethia.—A Hindu or Jain merchant.

SHIGURAM.—See TONGA.

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SULTAN.—A King.

SUNNAT.—Traditional law followed by Sunnis.

SUPARI.—The fruit of the betel palm, ARECA CATECHU.

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TAKAVI.—Loans made to agriculturists for seed, bullocks, or agricultural improvements; syn. tagai, Bombay

TAL.—Lake; Musical time.

TALATI.—Village accountant.

TALAV, or talao.—A lake or tank.

TALUK, taluka.—The estate of a talukdar in Oudh. A revenue sub-division of a District, in Bombay, Madras and Mysore; syn. tashil.

TALUKDAR.—A landholder with peculiar tenures in different parts of India. (1) An official in the Hyderabad State, corresponding to the Magistrate and Collector (First Talukdar) or Deputy Magistrates and Collectors (Second and Third Talukdars); (2) a landholder with a peculiar form of tenure in Gujarat.

TALPUR.—The name of a dynasty in Sind.

TAMAKHU, TAMBAKU.—Tobacco.

TAMTAM, tumtum.—A North Indian name for a light trap or cart.

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TANZIM.—Literally "organization." A movement among the Mahomedans which aims at securing better education and a closer approach to unity among Mahomedans in India.

TAPEDAR.—See PATWARI.

TARAI.—A moist swampy tract; the term especially applied to the tract along the foot of the Himalayas.

TARI, toddy—The sap of the date, palmyra, or cocoanut palm, used as a drink, either fresh or after fermentation In Northern India the juice of the date is called Sendhi.

TASAR, tussore.—Wild silkworms, ANTHERAEA PAPHIA; also applied to the cloth made from their silk.

TAZIA.—Lath and paper models of the tombs of Hasan and Husain, carried in procession at the Muharram festival; syn. tabut.

TEAK.—A valuable timber tree in Southern and Western India and Burma, TECTONA GRANDIS.

RAJ RAJESHWAR.—King of Kings.

RAMOSHI.—A caste whose work is watch and ward in the village lands and hence used for any chaukidar (*q. v.*) Actually a criminal tribe in Maharashtra.

RANA.—A title borne by some Rajput chiefs, equivalent to that of Raja.

RANI.—The wife or widow of a Raja.

RANZA.—Mausoleum, shrine.

RAO.—A title borne by Hindus, either equivalent to, or ranking below that of Raja.

REGAR.—Name for a black soil in Central and Southern India, which is very retentive of moisture, and suitable for growing cotton.

REGULATION.—A term formerly applied to certain provinces to show that the Regulations or full code of legislation applied to them.

REH.—Saline or alkaline efflorescences on the surface of the soil, Northern India.

RESERVED.—Forests intended to be maintained permanetly.

RICKSHAW.—A one or two seat vehicle on two wheels drawn by coolies, used in the hills.

RISALDAR.—Commander of a troop of horses.

ROHI-ROZ.—Nilgai.

ROHU.—A kind of fish, LABEO ROHITA.

ROTI.—Bread.

ROZA.—Muslim fast during Ramazan.

RYOTWARI.—The system of tenure in which land revenue is imposed on the actual occupants of holdings.

SADHU.—A Hindu Ascetic.

SADR, sudder.—Chief (adjective). Hence the headquarters of a District; formerly applied to the Appellate Courts.

SAFA JANG—A long-handled battleaxe carried by Jat Sikhs.

SAFFLOWER.—A thistle which yields a yellow dye from its petals and oil from its seeds (CARTHAMUS TINCTORIUS), ver. kardai, kushanti.

SAHEB.—The Native Hindu term used to or of a European (" Mr. Smith " would be mentioned as " Smith Saheb," and his wife " Smith Mem-Saheb," but in addressing it would be " Saheb," fem. " Saheba," without the name); occasionally appended to a title in the same way as " Bahadur," but inferior (=master). The unusual combination " Nawab Saheb " implies a mixed population of Hindus and Mohammedans.

SAHIBZADA.—Son of a person of consequence.

SAID, SAYID, SAIYID, SIDI, SYED, SYUD—Various forms for a title adopted by those who claim direct male descent from Mohammed's grandson Husain.

SAL.—A useful timber tree in Northern India SHOREA ROBUSTA.

SAMBAR.—A deer, CERVUS UNICOLOR; syn. sarau.

SAN.—Bombay hemp, CROTALARIA JUNCEA.

SANAD—(1) A charter or grant, giving its name to a class of States in Central India held under a sanad, (2) any kind of deed of grants.

SANGATHAN.—Literally tying together. A movement which aims at unity and the knowledge of the art of self-defence among Hindus. Roughly similar to Fasciemo.

SANNYASI.—A Hindu mendicant.

SARI.—A long piece of cloth worn by women as a shawl.

SARANJAM.—Land held revenue free or on a reduced quit-rent in consideration of political services rendered by the holder's ancestors originally feudal tenure land for maintaining troops.

SARDAR (corrupted to SIRDAR).—A leading Government official, either civil or military, even a Grand Vizier. Nearly all the Punjab Barons bear this title, It and " Diwan " are like in value and used by both Hindus and Mohammedans. So, but Mohammedans only, are " Wali," " Sultan," " Amir," " Mir," " Mirza," " Mian," and " Khan."

SARKAR.—(1) The Government; (2) a tract of territory under Muhammadan rule, corresponding roughly to a Division under British administration.

SARSUBAH.—An officer in charge of a Division in the Baroda State corresponding to Commissioner of British territories.

SATI.—Suicide by a widow, especially on the funeral pyre of her husband.

SAHUKAR, SAUKAR, SOWKAR.—Banker, dealer in money, exchange etc.; money lender.

SATYAGRAHA.—(lit.) One possessed by the truth; one who follows the truth wherever it may lead. (Commonly used to denote the passive resistance movement.)

SATTA.—Speculation.

SAUDAGAR.—Merchant.

SAWAI.—A Hindu title implying a slight distinction (lit. one-fourth better than others).

SAWBWA.—A title borne by chiefs in the Shan States, Burma.

SEMAL or cotton tree.—A large forest tree with crimson flowers and pods containing a quantity of floss, BOMBAY MALABARICUM.

SEROW, sarau.—A goat antelope, NEMORHAEDUS BUBALINUS.

SETH, SHETH.—Merchant, banker.

SETTLEMENT.—(1) The preparation of a cadastral record, and the fixing of the Government revenue from land; (2) the local inquiry made before Forest Reserves are created; (3) the financial arrangement between the Government of India and Local Governments.

SHAHID—A martyr.

SHAHZADA.—Son of a King.

SHAIKH or SHEIKH (Arabic)—A chief.

SHAMS-UL-ULAMA.—A Mohammedan title denoting " learned."

SHAMSHER-JANG.—" Sword of Battle " (a title of the Maharaja of Travancore.)

SHANBHOG.—See PATWARI.

SHASTRAS.—The religious law-books of the Hindus.

SHEGADI, seggaree.—A pan on 3 feet with live charcoal in it.

SHER, ser, seer—A weight, or measure varying much in size in different parts of the country. The Railway ser is about 2 lbs.

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TEAK.—A valuable timber tree in Southern and Western India and Burma, TECTONA GRANDIS.

TELEGRAPHIC TRANSFERS.—See Council bills.

THAGI, thuggee.—Robbery after strangulation of the victim.

THAKUR.—(1) The modern equivalent of the caste name Kshattriya in some parts of Northern India; (2) a title of respect applied to Brahmans; (3) a petty chief; (4) a hill tribe in the Western Ghats.

THAMIN.—The brow-antlered deer, Burma, CERVUS ELDI.

THANA.—Military or Police-Station hence the circle attached to it.

TIKA.—(1) Ceremonial anointing on the forehead; (2) vaccination.

TIKA SAHEB.—Heir-apparent in several North Indian States.

TIKAM.—The English pickaxe (of which the word is a corruption).

TIL.—An oilseed, SESAMUM INDICUM; also known as gingelly in Madras.

TINDAL, tandel.—A foreman, subordinate officer of a ship.

TIPAI, Teapoy.—A table with 3 legs, and hence used of any small European style table.

TOLA.—A weight equivalent to 180 grains (troy).

TONGA.—A one or two horsed vehicle with a covered top; syn. SHIGHRAM.

TSINE.—Wild cattle found in Burma and to the southward, BOS SONDAICUS ; syn. hsaing and banteng.

TUMANDAR.—A Persian word denoting some Office.

UMARA.—Term implying the Nobles collectively.

UMBAR.—A wild pig—(FICUS GLOMERATA).

UNIT.—A term in famine administration denoting one person relieved for one day.

URDU.—Hindustani Language as spoken and written by Musalmans opposed to Hindi, spoken and written by Hindus.

URIAL.—A wild sheep in North-Western India, OVIS VIGNEI.

URID, UDID.—A pulse, 'black grain' (PHASEOLUS MUNGO).

USAR.—Soil made barren by saline efflorescence, Northern India.

USTAD.—Master, teacher, one skilled in any art or science.

VAHIVATDAR.—Officer in charge of a revenue sub-division, with both executive and magisterial functions, Baroda; syn. tahsildar.

VAID or baidya, Bengal.—A native doctor practising the Hindu system of medicine.

VAKIL.—(1) A class of legal practitioners; (2) an agent generally.

VEDA.—Revealed sacred books of Hindus.

VEDANTA.—The philosophy of the Upanishads.

VIHARA.—A Buddhist monastery.

VILLAGE.—Usually applied to a certain area demarcated by survey, corresponding roughly to the English parish.

VILLAGE UNION.—An area in which local affairs are administered by a small committee.

WADA or WADI.—(1) An enclosure with houses built round facing a centre yard; (2) private enclosed land near a village.

WAKF.—A Muhammadan religious or charitable endowment.

WALI.—Like "Sardar." The Governor of Khelat is so termed, whilst the Chiefs of Cabul are both "Wali" and "Mir."

WAO.—A step well.

WATAN.—A word of many senses. In Bombay Presidency used mostly of the land or cash allowance enjoyed by the person who performs some service useful for Government or to the village community.

WAZIR.—The chief minister at a Mahomedan court.

WET RATE.—The rate of revenue for land assured of irrigation.

YAMA.—Hindu god of death.

YOGA.—A system of Hindu philosophy; Practice of breath control etc., said to give supernatural powers.

YOGI.—A Hindu ascetic who follows the yoga system, a cardinal part of which is that it confers complete control over the bodily functions enabling the practiser, for instance to breathe in through one nostril and out at the other.

YUNANI.—Lit. Greek; the system of medicine practised by Mahomedans.

ZABARDAST.—Lit. "Upper hand," hence strong, oppressive.

ZABARDASTI.—Oppression.

ZAMINDAR.—A landholder.

ZAMINDARI.—(1) An estate; (2) the rights of a landholder, zamindar; (3) the system of tenure in which land revenue is imposed on an individual or community occupying the position of a landlord.

ZANANA.—Of women.

ZIARAT.—Pilgrimage. Ziarat-gah, any shrine or tomb to which people go in pilgrimage.

ZILA.—A District.

ZOR-TALABI.—Tribute paid to Junagadh Darbar by numerous Kathiawar States.

ZULM, ZULUM.—Tyranny, Oppression.

The Peoples of India.

It is essential to bear in mind, when dealing with the people of India, that it is a continent rather than a country. Nowhere is the complex character of Indians more clearly exemplified than in the physical type of its inhabitants. No one would confuse the main types, such as Gurkhas, Pathans, Sikhs, Rajputs, Burmans, Nagas, Tamils, etc., nor does it take long to carry the differentiation much farther. The typical inhabitants of India—the Dravidians—differ altogether from those of Northern Asia, and more nearly resemble the tribes of Malaya, Sumatra and Madagascar. Whatever may be their origin, it is certain that they have settled in the country for countless ages and that their present physical charactrestics have been evolved locally. They have been displaced in the North-West by successive hordes of invaders, including Aryans, Scythians, Pathans and Moghals, and in the North-East by Mongoloid tribes allied to those of Burma, which is India only in a modern political sense. Between these foreign elements and the pure Dravidians is borderland where the contiguous races have intermingled.

The people of the Indian Empire are divided by Sir Henry Risley (Caste, Tribe and Race, Indian Census Report, 1901; the Gazetteer of India, Ethnology and Caste, Volume I, Chapter 6) into seven main physical types. There would be eight if the Andamanese were included, but this tiny group of Negritos may be disregar ded.

The Turko-Iranian, represented by the Baloch, Brahui and Afghans of Baluchistan and the North-West Frontier Province. Probably formed by a fusion of Turki and Persian elements in which the former predominate. Stature above mean; complexion fair; eyes mostly dark but occasionally grey; hair on face plentiful; head broad, nose moderately narrow, prominent, and very long. The feature in these people that strikes one most prominently is the portentous length of their noses, and it is probably this peculiarity that has given rise to the tradition of the Jewish origin of the Afghans.

The Indo-Aryan occupying the Punjab, Rajputana, and Kashmir, and having as its characteristic members the Rajputs, Khattris, and Jats. This type, which is readily distinguishable from the Turko-Iranian, approaches most closely to that ascribed to the traditional Aryan colonists of India. The stature is mostly tall; complexion fair; eyes dark; hair on face plentiful, head long; nose narrow, and prominent, but not specially long.

The Scytho-Dravidian, comprising the Maratha Brahmans, the Kunbis, and the Coorgs of Western India. Probably formed by a mixture of Scythian and Dravidian elements. This type is clearly distinguished from the Turko-Iranian by a lower stature, a greater length of head, a higher nasal index, a shorter nose, and a lower orbito-nasal index. All of these characters, except perhaps the last, may be due to a varying degree of intermixture with the Dravidians. In the higher groups the amount of crossing seems to have been slight; in the lower Dravidian elements are more pronounced.

The Aryo-Dravidian or Hindustani, found in the United Provinces, in parts of Rajputana, and in Bihar and represented in its upper strata by the Hindustani Brahman and in its lower by the Chamar. Probably the result of the intermixture, in varying proportions, of the Indo-Aryan and Dravidian types. The head-form is long with a tendency to medium; the complexion varies from lightish brown to black; the nose ranges from medium to broad, being always broader than among the Indo-Aryans; the stature is lower than in the latter group, and usually below the average according to the scale. The higher representatives of this type approach the Indo-Aryans, while the lower members are in many respects not very far removed from the Dravidians. The type is essentially a mixed one, yet its characteristics are readily definable, and no one would take even an upper class Hindustani for a pure Indo-Aryan or a Chamar for a genuine Dravidian. The distinctive feature of the type, the character which gives the real clue to its origin and stamps the Aryo-Dravidian as racially different from the Indo-Aryan is to be found in the proportions of the nose.

The Mongolo-Dravidian, or Bengali type of Lower Bengal and Orissa, comprising the Bengal Brahmins and Kayasthas, the Mahomedans of Eastern Bengal, and other groups peculiar to this part of India. Probably a blend of Dravidian and Mongoloid elements, with a strain of Indo-Aryan blood in the higher groups. The head is broad; complexion dark; hair on face usually plentiful; stature medium; nose medium, with a tendency to broad. This is one of the most distinctive types in India, and its members may be recognised at a glance throughout the wide area where their remarkable aptitude for clerical pursuits has procured them employment. Within its own habitat the type extends to the Himalayas on the north and to Assam on the east, and probably includes the bulk of the population of Orissa; the western limit coincides approximately with the hilly country of Chota Nagpur and Western Bengal.

The Mongoloid type of the Himalayas, Nepal, Assam, and Burma, represented by the Kanets of Lahul and Kulu; the Lepchas of Darjeeling and Sikkim; the Limbus, Murmis and Gurungs of Nepal; the Bodo of Assam; and the Burmese. The head is broad; complexion dark, with a yellow tinge; hair on face scanty; stature short or below average; nose fine to broad, face characteristically flat; eyelids often oblique.

The Dravidian type extending from Ceylon to the valley of the Ganges, and pervading Madras, Hyderabad, the Central Provinces, most of Central India and Chota Nagpur. Its most characteristic representatives are the Paniyans of Malabar and the Santals of Chota Nagpur. Probably the original type of the population of India, now modified to a varying extent by the admixture of Aryan, Scythian, and Mongoloid elements. In typical specimens the stature is short or below mean; the complexion very dark, approaching black; hair plentiful, with an occasional tendency to curl; eyes dark; head long; nose very broad, sometimes depressed at the root, but not so as to make the face appear

flat. This race, the most primitive of the Indian types, occupies the oldest geological formation in India, the medley of forest-clad ranges, terraced plateau, and undulating plains which stretch roughly speaking, from the Vindhyas to Cape Comorin. On the east and the west of the peninsular area the domain of the Dravidian is conterminous with the Ghats, while further north it reaches on one side to the Aravallis, and on the other to the Rajmahal Hills. Where the original characteristics have been unchanged by contact with Indo Aryan or Mongoloid people, the type is remarkably uniform and distinctive. Labour is the birthright of the pure Dravidian whether hoeing tea in Assam, the Duars, of Ceylon, cutting rice in the swamps of Eastern Bengal or doing scavenger's work in the streets of Calcutta, Rangoon and Singapore, he is recognizable at a glance by his black skin, his squat figure, and the negro-like proportion of his nose. In the upper strata of the vast social deposit which is here treated as Dravidian these typical characteristics tend to thin and disappear, but even among them traces of the original stock survive in varying degrees.

The areas occupied by these various types do not admit of being defined as sharply as they must be shown on an ethnographic map. They melt into each other insensibly; and although at the close of a day's journey from one ethnic tract to another, an observer whose attention had been directed to the subject would realise clearly enough that the physical characteristies of the people had undergone an appreciable change, he would certainly be unable to say at what particular stage in his progress the transformation had taken place.

MAIN STATISTICS OF THE INDIAN EMPIRE.

The Indian Empire has an area of 1,805,332 square miles, about 3,000 square miles being added at the last census owing to the enumeration by estimate of certain tracts in Burma which had been excluded from previous censuses.

Of the total area 1,094,300 square miles, or 61 per cent. lie in British Territory, while the Indian States cover an area of 711,032 square miles, or 39 per cent. The total population is 318,942,480, British Territory containing 247,003,293 persons, or 77 per cent., and the Indian States 71,939,187 persons, or 23 per cent. of the whole population. It is usual to illustrate these figures by comparison with the countries of Europe and in respect of area and population the Indian Empire has been frequently compared to Europe without Russia. The war has, however, considerably altered the national and political distribution of countries and the new political map of Europe is perhaps hardly yet sufficiently familiar to form a graphic contrast. Turning further west we find that India with an area about half that of the United States has a population almost three times as large.

The most important statistics are set out in the following table :—

——	India.	British Provinces.	Indian States.
Area in Square Miles	1,805,332	1,094,300	711,032
Number of Towns and Villages	687,981	500,088	187,893
(*a*) Towns	2,316	1,561	755
(*b*) Villages	685,665	498,527	187,138
Number of Occupied Houses	65,198,389	50,441,636	14,756,753
(*a*) In Towns	6,765,014	5,046,820	1,718,194
(*b*) In Villages	58,433,375	45,394,816	13,038,559
Total Population	318,942,480	247,003,293	71,939,187
(*a*) In Towns	32,475,276	25,044,368	7,430,908
(*b*) In Villages	286,467,204	221,958,925	64,508,279
Males	163,995,554	126,872,116	37,123,438
(*a*) In Towns	17,845,248	13,971,136	3,874,112
(*b*) In Villages..	146,150,306	112,900,980	33,249,326
Females	154,946,926	120,131,177	4,815,749
(*a*) In Towns..	14,630,028	11,073,232	3,556,796
(*b*) In Villages	140,316,898	109,057,945	31 258,953

Density.—Over the whole of India the population per square mile averages 177, the mean density in the British Provinces being 226 and in the States 101. If the districts (and small States) are taken as a unit, and the cities are excluded, the mean density ranges between a minimum of 1 and a maximum of 1,882 per square mile. The unequal distribution of the population of India is due to causes analysed in previous editions of the Year Book; it is chiefly dictated by physical conditions. Other influences are at work, such as the state of law and order, the means of communication, climate, and the existence of irrigation. Indusarial factors are becoming more and more important as the population moves out of the congested rural tracts to supply the labour needed for industrial enterprise—for the tea in Assam, the docks and jute mills of Calcutta, the mineral of Bengal and Chota Nagpur, the cotton of Bombay and the coffee and rubber of Southern India. For the purposes of comparison the manner in which the population is distributed in other countries of the world is indicated in the following statement :—

Belgium	654
England and Wales	649
France..	184
Germany	332
The Netherlands	544
Austria	199
Spain	107
Japan	215
United States	32
New Zealand	1·18

MOVEMENT OF THE POPULATION.

The population of India has increased by 1·2 per cent. during the decade. The figures of previous censuses with the variations per cent. are given below. The average increase since the census of 1872 falls at a rate of 5·5 per cent., but the real gain is considerably less than this figure owing to two factors, (*a*) the additions of area and population included at each census and (*b*) the progressive increase in the accuracy of the enumeration from census to census. So far as the present census is concerned the additional area and population included amount to 2,675 square miles and 86,533 persons, respectively, while for the present purpose it may be taken that the enumeration of 1921 was, as regards numbers, as accurate but not more accurate than that of 1911. The real increase in the population during the last 49 years is thus estimated at about fifty-four millions or 20·1 per-cent.

Census of	Population.	Variation per cent. since previous census.
1872	206,162,360	—
1881	253,896,330	+23·2
1891	287,314,671	+13·2
1901	294,361,056	+ 2·5
1911	315,156,396	+ 7·1
1921	318,942,480	+ 1·2

Factors in the Movement.—The increase was slightly greater in the British districts (1·3) than in the States (1·0). Assam and Burma show comparatively high rates of increase; immigration is an important factor in the rise in Assam, but neither of these Provinces was exposed to the invasion of influenza which wiped off the whole of the natural increase in the Central Provinces and Berar, Bihar and Orissa, and Bombay, and substantially reduced the population in the United Provinces and Rajputana, the Central India Agency, and Hyderabad State. The stimulus given to agricultural prosperity in the Punjab by a large expansion of canal irrigation did much to neutralise the effects of the high death rate in 1918. In Bengal and Madras unhealthy conditions were more localised and the development of the population was only partially retarded.

The War.—The war itself had little direct effect on the population of India. Such effect could operate in three ways (1) by death casualties, (2) by increasing the number of persons outside India at the census, and (3) by decreasing the birth-rate. The actual number of death casualties among the officers and ranks of Indian Army units and labour corps was 58,238. The maximum number serving out of India in combatant and labour units at any one time between 1914 and 1919 was, approximately, Indian troops 250,000, labour corps 230,000, total 480,000; the number about the time of the census being troops 105,000, labour corps 20,800, total 125,800. So far as the larger totals are concerned the war is not a direct factor of any importance in the census in any province.

Economic Conditions.—In considering the economic factors which determined the movement of the population during the decade it can be divided into two periods, a fairly normal period from 1911 to 1917 and the disastrous epidemic year 1918, accompanied by scarcity and followed by a second crop failure in 1920. In 1917 conditions in India began to respond to the world conditions of the war, men for the fighting and labour units and food, munitions and war material of all kinds were demanded. The strain on the railway organisation dislocated the local markets and the distribution system of the country was impaired. The rising prices of imported necessities hit the poorer classes. Then followed the disastrous seasons of 1918 and 1919. Famine relief organisation is now so highly perfected in India that scarcity is not necessarily accompanied by high mortality but influenza, starting in 1918, visited almost every portion of the country and in a few months wiped out the natural increase in the population of the previous seven years.

Public Health.—The distinctive feature of the decade 1901-1911 was plague. The recorded number of deaths from plague in the ten years was 6½ millions. In the recent decade the deaths were less than half that number. Cholera is normally most prevalent in the Eastern Provinces.

Virulent as the epidemic can still be when its hold is established it is now usually of a temporary and local nature, and the total death-rate in British India from the disease during the decade did not amount to more than 1·5 per cent. By far the largest number of deaths

in India are entered under the category of "fever," and allowing for inaccuracy of diagnosis it has usually been assumed that about two-thirds of the deaths so recorded may be ascribed to malaria. Recent investigations made in special areas, however, suggest that this proportion has been considerably overestimated and that malaria only accounts for from one-fifth to one-fourth of the number of reported fever cases, the remainder being cases of dysentery, pneumonia, phthisis and other diseases.

In the last few years the prevalence of an affection which is the cause of considerable mortality called *Relapsing Fever* has received considerable attention by the Health Department. This disease has been diagnosed as common in most parts of the country, specially in the northern provinces and in the Central Provinces and Berar and Bombay, but the extent of the mortality which can be ascribed to it cannot at present be estimated. Nor can figures be given of phthisis which is undoubtedly responsible for considerable mortality; especially in the towns of western India, the deaths from this disease in Ahmedabad amounting in 1918 to 5 per mille of the population. All other factors in the health of the people have been overshadowed by the influenza epidemic of 1918 and 1919 which has dominated the population figures at the 1921 census.

Influenza :—The influenza epidemic of 1918 invaded India in two distinct waves. The first infection apparently radiated from Bombay, but it is impossible to say where the more virulent virus of the second invasion came from.

The rural areas were most severely infected, the reason probably being that while villages have little advantage over towns in the matter of overcrowding, sanitation and ventilation the urban areas have the benefit of qualified medical aid and organised effort. Mortality was specially high among adults (20-40), particularly among adult females, the disease being generally fatal to women in pregnancy. At the worst period whole villages were absolutely laid desolate by the disease. There was sometimes no means of disposing of the dead, crops were left unharvested and all local official action was largely paralysed, owing to the fact that the majority of the official staff were put out of action by the epidemic. To add to the distress the disease came at a period of widespread crop failure and reached its climax in November when the cold weather had set in; and, as the price of cloth happened at the time to be at its highest, many were unable to provide themselves with the warm clothing that was essential in the case of an illness that so readily attacked the lungs. The disease lasted in most provinces well into 1919 and gave a high mortality in that year in Bengal and the United Provinces. Even after it had subsided there were in the Central Provinces, Bombay and Burma mild recrudescences later in the year, while local outbreaks continued over the country during the next two years.

There is no direct means of ascertaining the mortality from the epidemic. Various estimates have been made based on the excess mortality over some suitable mean. The average of these calculations gives a total number of deaths in the areas under registration of about 7,100,000 in 1918, to which must be added, as the results of similar calculation, another 1½ million deaths in 1919, giving a total recorded mortality of nearly 8½ millions in the two years. Even this, however, must be a substantial underestimate since, owing to the complete breakdown of the reporting staff, the registration of vital statistics was in many cases suspended during the progress of the epidemic in 1918.

The total influenza mortality for India is put at between 12 and 13 millions. This is a conservative estimate. Even this estimate makes the influenza mortality, a large part of which occurred in three or four months, exceed by nearly two millions the total estimated deaths from plague in twenty years. On an estimated case mortality of ten per cent. the total number of persons affected was 125 millions or two-fifths of the population of India. There was a further reaction on the birth rate.

Houses and Families.—The average number of persons per house has not changed in the last decade, though there was a decline between 1881 and 1911. The trend of the figures varies in different provinces, but they do not afford substantial ground for any material inference. It would, for example, be expected that the incidence of the influenza mortality would fall fairly evenly upon the individual households and would therefore cause a reduction in the number of persons per house. It does not appear to have done so either in Bombay, the United Provinces, the Central Provinces, or Rajputana, while in Bengal, where there is a rise in the population, there is a fall in the size of the household. The figures are unsatisfactory, and though they invite a discussion on the condition of the joint family it is doubtful if they can really be held to illuminate it. The general opinion of the Provincial Superintendents is that they do not do so and that other indications do not show that the joint family system has yet undergone any radical change, at any rate in the agricultural tracts of the country.

Census.	Persons per house.	Houses per square mile.
1921	4·9	36·1
1911	4·9	35·8
1901	5·2	31·6
1891	5·4	33·9
1881	5·8	31·7

Variation in Natural Population 1911—1921.

Province, State of Agency.	Population in 1921.				Population in 1911.				Variation per cent. (1911-1921) in Natural Population Increase(+) Decrease(—)
	Actual population.	Immi-grants.	Emi-grants.	Natural population.	Actual population.	Immi-grants.	Emi-grants.	Natural. population.	
INDIA.	318,885,980	603,526	1,050,951	319,333,405	315,110,231	625,122	1,023,505	315,508,614	+ 1·2
Ajmer-Merwara ..	495,271	109,890	42,420	427,801	501,359	96,578	84,110	488,927	— 12·5
Andamans & Nicobars.	27,086	15,120	316	12,282	26,495	14,402	970	13,027	— 5·7
Assam	7,990,246	1,290,157	75,978	6,776,067	7,059,857	882,068	74,294	6,252,083	+ 8·4
Baluchistan	799,625	78,387	60,421	781,659	834,703	58,500	76,273	852,476	— 8·3
Bengal..	47,592,462	1,929,640	697,047	46,359,869	46,305,642	1,970,778	584,757	44,919,621	+ 3·2
Bihar & Orissa ..	37,961,858	422,244	1,955,048	39,494,662	38,435,293	449,712	1,916,806	39,902,387	— 1·0
Bombay	26,701,148	1,081,649	592,009	26,211,508	27,038,152	995,844	622,831	26,665,139	— 1·7
Burma..	13,212,192	706,725	20,295	12,525,762	12,115,217	590,965	14,166	11,538,418	+ 8·6
C. P. & Berar.. ..	15,979,660	609,504	407,294	15,777,450	16,033,310	749,985	315,233	15,598,558	+ 1·1
Coorg	163,838	33,937	2,852	132,753	174,976	45,535	3,862	133,303	— 0·4
Madras	42,794,155	209,862	1,756,462	44,340,755	41,870,160	253,877	1,518,179	43,134,462	+ 2·7
N.-W.F. Province ..	5,076,476	157,562	84,495	5,003,409	3,819,027	135,345	67,378	3,751,060	+ 33·3
Delhi	488,188	185,770	69,350	371,768	} 24,187,750	660,219	517,485	24,045,016	+ 5·6
Punjab	25,101,060	627,137	549,429	25,023,352					
United Provinces ..	46,510,668	480,414	1,402,541	47,432,795	48,014,080	660,085	1,429,310	48,783,305	— 2·7
Baroda State	2,126,522	232,494	221,602	2,115,630	2,032,798	222,957	235,528	2,045,369	+ 3·4
Gwalior State.. ..	3,186,075	290,340	289,029	3,184,764	} 9,356,980	474,255	536,133	9,418,858	— 3·1
Central India (Agency)	5,997,023	548,094	486,643	5,935,572					
Cochin State ..	979,080	39,759	28,338	967,659	918,110	47,266	23,268	894,112	+ 8·2
Hyderabad State ..	12,471,770	202,781	363,751	12,632,740	13,374,676	260,713	306,388	13,420,351	— 5·8
Kashmir State ..	3,320,518	63,420	84,291	3,341,389	3,158,126	76,773	81,968	3,163,321	+ 5·6
Mysore State	5,978,892	314,531	102,104	5,766,465	5,806,193	312,908	139,607	5,632,892	+ 2·3
Rajputana (Agency)..	9,844,384	243,002	868,117	10,469,499	10,530,432	303,553	855,947	11,082,826	— 5·5
Sikkim State	81,721	22,978	4,133	62,876	87,920	29,835	3,445	61,530	+ 2·1
Travancore State ..	4,006,062	73,591	30,250	3,962,721	3,428,975	61,165	33,143	3,400,953	+ 16·5

NOTES.—

(1) The figures for the Provinces are inclusive of the States attached to them except in the case of Madras where they exclude Cochin and Travancore.

(2) The Actual and Natural population shown in this table is less by 56,500 persons owing to the exclusion of Aden where Table XI was not compiled.

(3) Columns 2 and 6—Persons not enumerated by birth-place or whose birth-place was not returned have been included in these columns.

(4) Columns 4 and 8—The figures against India in columns 4 and 8 represent emigrants to foreign countries, details of which for 1921 will be found in Subsidiary Table V of Chapter III.

AREA OF INDIA AND THE PROVINCES AND STATES.

Province, State or Agency.	Area in Square miles in		Difference, Increase +, Decrease —.
	1921.	1911.	
INDIA.	1,805,332	1,802,657	+2,675
Provinces.	1,094,300	1,093,074	+1,226
Ajmer-Merwara	2,711	2,711	—
Andamans and Nicobars	3,143	3,143	—
Assam	53,015	53,015	—
Baluchistan (Districts and Administered Territories)	54,228	54,228	—
Bengal	76,843	78,699	—1,856
Bihar and Orissa	83,161	83,181	—20
Bombay	123,621	123,059	+562
Burma	233,707	230,839	+2,868
Central Provinces and Berar	99,876	99,823	+53
Coorg..	1,582	1,582	—
Madras	142,260	142,330	—70
North-West Frontier Province (Districts and Administered Territories)	13,419	13,418	+1
Punjab and Delhi	100,439	99,779	+660
United Provinces	106,295	107,267	—972
States and Agencies.	711,032	709,583	+1,449
Assam State (Manipur)	8,456	8,456	—
Baluchistan States	80,410	80,410	—
Baroda State	8,127	8,182	—55
Bengal States	5,434	5,393	+41
Bihar and Orissa States	28,648	28,648	—
Bombay States	63,453	63,864	—411
Central India Agency and Gwalior State	77,888	77,367	+521
Central Provinces States	31,176	31,174	+2
Hyderabad State	82,698	82,698	—
Kashmir State	84,258	84,432	—174
Madras States	10,696	10,549	+147
Mysore State	29,475	29,475	—
North-West Frontier Province (Agencies and Tribal Areas)	25,500	25,500	—
Punjab States	37,059	36,551	+508
Rajputana (Agency)	128,987	128,987	—
Sikkim State	2,818	2,818	—
United Provinces States	5,949	5,079	+870

NOTE.—The difference in areas is due to the use of revised survey figures and to corrections for fluvial action; in Bengal, Bihar and Orissa, the Punjab and the United Provinces it is also due to inter provincial transfers.

THE POPULATION OF INDIA AT SIX CENSUSES.

—		India.	British Provinces.	Indian States.
Total Population	1921	318,942,480	247,003,293	71,939,187
	1911	315,156,396	243,933,178	71,223,218
	1901	294,361,056	231,259,098	63,101,958
	1891	287,314,671	220,879,388	66,435,283
	1881	253,896,330	198,545,380	55,350,950
	1872	206,162,360	184,858,172	21,304,188
Males	1921	163,995,554	126,872,116	37,123,438
	1911	161,338,935	124,707,915	36,631,020
	1901	149,951,824	117,482,836	32,468,988
	1891	146,769,629	112,394,551	34,375,078
	1881	129,949,290	101,165,117	28,784,173
	1872	106,055,545	95,136,615	10,918,930
Females	1921	154,946,926	120,131,177	34,815,749
	1911	153,817,461	119,225,263	34,592,198
	1901	144,409,232	113,776,262	30,632,970
	1891	140,545,042	108,484,837	32,060,205
	1881	123,947,040	97,380,265	26,566,777
	1872	100,106,815	89,721,557	10,385,258

Future Population of India.—A study of the growth of the population of India and the problems which it presents is vitiated by the abnormal conditions of the past decade. It was pointed out in the census report of 1911 that the rate of increase of population between 1872 and 1911 was equivalent to about 19 per cent., and that at this rate the population would double itself in about a century and a half. The real increase in the last fifty years in the population of India is just over 20 per cent. At this rate the doubling will take another 190 years. But calculations of this kind, though of interest, can hardly be taken seriously. Almost every one of the last five decades has witnessed some special disaster. A severe famine in South India checked the increase in the decade 1872-1881. The decennium 1891-1901 was dominated by the great famines of the closing period. Growth in Northern and Western India was checked in the succeeding decade by plague and we have had in the past decennium an epidemic which has caused more concentrated mortality than any previous calamity. The decade 1881-1891 alone was free from any exceptional calamity and is usually considered a period of fairly normal progress.

Difference between the birth-rate and death-rate estimated by the actuary for certain provinces in certain decades.

Province.	1881-1891.	1901-1911.
Bengal	7·0	7·3
Bombay ..	13·9	5·2
Burma	..	11·1
Madras	13·3	8·5
Punjab	9·8	5·7
United Provinces ..	6·5	0·6
Combined Provinces ..	..	8·2

TOWN AND COUNTRY.

The progress of urbanisation in India—if there has been any progress at all—has been very slow during the past thirty years, the whole increase being less than one per cent. An examination of the statistics shows that whilst towns with populations above 50,000, increased by over 16 per cent. in the decade, the increase was considerably less in those between 5,000 and 50,000, whereas the population of towns between 10 to 20 thousand did not keep abreast of the progress of the general population of the country. The statistics reveal the gradual decadence of the medium-size country town and the growth of the larger cities under the influence of commercial and industrial development

DISTRIBUTION OF POPULATION IN GROUPS OF TOWNS ACCORDING TO SIZE AND IN RURAL TERRITORY.

Class of places.	1921.		1921
	Places.	Population.	Per cent.
Total Population	687,935	316,017,751	100·0
Urban Territory	2,313	32,418,776	10·2
Towns having—			
I. 100,000 and over	35	8,211,704	2·6
II. 50,000 to 100,000	54	3,517,749	1·1
III. 20,000 to 50,000	199	5,925,675	1·8
IV. 10,000 to 20,000	450	6,209,583	2·0
V. 5,000 to 10,000	885	6,223,011	2·0
VI. Under 5,000	690	2,331,054	·7
Rural Territory	685,622	283,598,975	89·8

Cities.—Statistical information for the 33 largest cities of India which have 100,000 or more inhabitants is given in the statement below:—

CITY.	Population 1921.	Number of persons per sq. mile.	Proportion of foreign born per mille.	Percentage of variation. 1911-21.
Calcutta with suburbs and Howrah	1,327,547	21,412	629	+ 4·3
Bombay	1,175,914	48,996	840	+20·1
Madras and Cantonment	526,911	18,169	335	+ 1·6
Hyderabad and Cantonment	404,187	7,925	275	—19·4
Rangoon and Cantonment	341,962	4,500	677	+16·6
Delhi and Cantonment	304,420	4,683	450	+30·7
Lahore and Cantonment	281,781	6,715	440	+23·2
Ahmedabad and Cantonment	274,007	24,909	397	+17·7
Lucknow and Cantonment	240,566	1,350	229	— 4·6
Bangalore	237,496	20,931	340	+25·3
Karachi and Cantonment	216,883	19,716	605	+42·8
Cawnpore and Cantonment	216,436	22,620	425	+21·2
Poona and Cantonment	214,796	5,369	373	+13·8
Benares and Cantonment	198,447	19,930	140	— 2·6
Agra and Cantonment	185,532	11,000	119	..
Amritsar and Cantonment	160,218	16,534	181	+ 4·9
Allahabad and Cantonment	157,220	10,250	266	— 8·4
Mandalay and Cantonment	148,917	5,917	209	+ 7·7
Nagpur	145,193	7,259	258	+43·2
Srinagar	141,735	15,653	21	+ 8·9
Madura	138,894	17,105	178	+ 2·8
Bareilly and Cantonment	129,459	16,800	128	..
Meerut and Cantonment	122,609	15,542	210	+ 5·1
Trichinopoly and Cantonment	120,422	13,622	176	— 2·5
Jaipur	120,207	40,069	63	—12·3
Patna	119,976	7,998	160	—11·9
Sholapur	119,581	17,083	391	+94·9
Dacca	119,450	17,566	140	+10·0
Surat and Cantonment	117,434	39,144	183	+ 2·2
Ajmer	113,512	6,677	537	+31·7
Jubbulpore and Cantonment	108,793	7,252	366	+ 8·1
Peshawar and Cantonment	104,452	34,817	349	+ 6·7
Rawalpindi and Cantonment	101,142	11,802	532	+17·0

In these statistics the population of Calcutta is taken as embracing the suburbs, and this method is apparently adopted in dealing with Calcutta only. It is not, for instance, adopted in dealing with the considerable suburbs of Bombay just outside the limits of the Island. The actual population of Calcutta within the Municipal area is 885,815.

Migration.—Of the population of the Indian Empire only 603,526 were enumerated as born in other parts of the world. Of these about four-fifths came from other Asiatic countries, such as Nepal, Afghanistan, China, Siam, Ceylon, and Arabia and the remainder mostly from Great Britain and other countries of Europe. The emigration from India is approximately 1·7 million, so the numbers who move between India and other countries is about two millions. Of the total immigrant population of 707,000 in Burma 573,000 are Indians, 102,000 Chinese, representing 80 and 15 per cent. respectively of the whole number. Of the Provinces which contribute most largely to the streams of migrants the most conspicuous are Bihar and Orissa, about 1½ million, the United Provinces about 1 million, Madras ⅗th of a million, Rajputana 3-5th of a million and Hyderabad 1-6th of a million. The number of persons resident in India who were born outside the Indian Empire is 603,526 and of these 274,000 were born in Nepal, 116,000 in the British Isles, 108,000 in China and 48,000 in Afghanistan.

The statistics of emigration outside India are far from complete.

The number of Indians belonging to regiments and labour-corps outside India at the time of the census was about 125,000. Of these the majority were probably in Mesopotamia and Palestine. According to the returns the number of Indians in the colonies, irrespective of birth-place, amounts to 1,662,000, of whom 1,028,000 or about two-thirds are males. More than four-fifths are Hindus and about half of the remainder are Musalmans. The colonies which attract an appreciable number of emigrants are shown below. About one-ninth of the emigrants failed to specify their province of birth, and of the remainder no less than 841,000 or 80 per cent. were from Madras, 24,000 from Bombay, 18,000 from the Punjab, 17,000 from the North-West Frontier Province and 11,000 from Bengal. The majority of the emigrants work as agricultural labourers on rubber, tea, coffee and other plantations. Under the Defence of India Rules indentured labour emigration was stopped in March 1917, but there had been a considerable outflow of labourers to the colonies in the previous years and more than 2·4 millions of natives of India passed through the ports of Madras and Calcutta as indentured labourers for the various colonies during the decade. Of the labourers 33,000 went from Calcutta, but the bulk were from the Madras Presidency and their destination was Ceylon and the Straits Settlements. There is very little emigration from the ports of Bombay and Karachi. Altogether about two million labourers returned to India from the colonies during the decade.

Indian emigrants to certain Colonies.

	In thousands.
Ceylon	461
Straits Settlements and Malay..	401
Natal	47
Trinidad	37
Fiji	33
Mauritius	17
Kenya	17

RELIGIONS.

The subject of religion is severely controversial in India, where often it is coloured by politics and racialism. As the Year Book aims at being impartial, all disputed inferences are excluded. Speaking broadly, of every hundred persons in the Indian Empire 68 are Hindus, 22 Mahomedans, 3 Buddhists, 3 follow the religion of their tribes, one is a Christian and one a Sikh. Of the remaining 2 one is equally likely to be a Buddhist or a Christian, and the other most probably a Jain, much less probably a Parsi and just as possibly either a Jew, a Brahmo, or a holder of indefinite beliefs. The enumerated totals of the Indian religions are set out in the following table:—

Religion.	Actual number in 1921. (000's omitted.)	Proportion per 10,000 of population in 1921.	Variation per cent, (Increase + Decrease—). 1911-1921.
Indo-Aryan	232,723	7,362	+ ·1
Hindu	216,735	6,856	— ·4
Brahmanic	216,261	6,841	— ·5
Arya	468	15	+92·1
Brahmo..	6	·2	+16·1
Sikh	3,239	103	+ 7·4
Jain	1,178	37	— 5·6
Buddhist	11,571	366	+ 7·9
Iranian [Zoroastrian (Parsi)]	102	3	+ 1·7
Semitic	73,511	2,325	+ 4·2
Musalman	68,735	2,174	+ 5·1
Christian	4,754	150	+22·6
Jew	22	·6	+ 3·8
Primitive (Tribal)	9,775	309	— 5·1
Miscellaneous (Minor Religions and religions not returned)	18	1	—51·5

The Hindus largely predominate in the centre and south of India, and in the Madras Presidency they are no less than 89 per cent. of the population. Hindus are in the majority in Assam, Bihar and Orissa, the United Provinces, the Central India tracts, Rajputana and Bombay. Muhammadans monopolize the North-West Frontier Province, Baluchistan and Kashmir and are considerably in excess in the Punjab and Eastern Bengal and Sind. They form about 28 per cent. of the population of Assam, 14 per cent. in the United Provinces and 10 per cent. in Hyderabad. The Buddhists are almost entirely confined to Burma where they are 85 per cent. of the population. The Sikhs are localized in the Punjab and the Jains in Rajputana, Ajmer-Merwara and the neighbouring States. Those who were classed as following Tribal Religions are chiefly found in Bihar and Orissa, the Central Provinces and Assam, but Bengal, Burma, Madras, Rajputana, Central India and Hyderabad also returned a considerable number under this head. More than three-fifths of the total number of Christians reside in South India including the Hyderabad State. The remainder are scattered over the continent, the larger numbers being returned in the Punjab, the United Provinces, Bengal, Bihar and Orissa, Burma, Bombay and Assam. The Parsis and Jews are chiefly residents of the Bombay Presidency.

Christians.—The Christian community now numbers just 4¾ millions of persons in India or 1½ per cent. of the population. Fifty-nine per cent. of Christians are returned from the Madras Presidency and its States, and the community can claim 32 persons in every 1,000 of the population of the British districts of Madras and as large a proportion as 27 per cent. in Cochin and 29 per cent. in Travancore, where the increase during the decade was about 30 per cent. Elsewhere the Christians are scattered over the larger Provinces and States of India, the Punjab and Bihar and Orissa each having over 300 thousands, Bombay, Burma and the United Provinces between 200 and 300 thousands and Bengal and Assam between 100 and 150 thousands. Divided racially Europeans (and allied races) number 176 thousands, Anglo-Indians, 113 thousands and Indians nearly 4½ millions, so that out of every 100 Christians 93 are Indians, 4 are Europeans and 3 are Anglo-Indians.

SECTS OF CHRISTIANS.

Sect.	Total. 1921.	Total. 1911.
INDIA.	4,753,174	3,873,958
Abyssinian	1	25
Anglican Communion	533,180	492,752
Armenian	1,467	1,200
Baptist	444,479	337,226
Congregationalist	123,016	135,265
Greek	237	594
Lutheran	240,816	218,500
Methodist	208,135	171,844
Minor Protestant Denominations	26,852	12,469
Presbyterian	254,838	181,130
Protestants (Unsectarian or Sect not specified)	73,909	32,180
Quaker	1,036	1,245
Roman Catholic	1,823,079	1,490,863
Salvationist	88,922	52,407
South India United Church	65,747	..
Syrian, Chaldæan	1,926	13,780
Syrian, Jacobite	252,989	225,190
Syrian, Nestorian	97	..
Syrian, Reformed	112,017	75,840
Syrian, Romo-Syrian	423,968	413,142
Syrian, Unspecified	559	344
Sect not returned	75,904	17,954

AGE AND SEX.

The figures of the total population of India are not tabulated by annual age-periods but the table below gives the age distribution of 10,000 males and females in the Indian population :

Age-group.	1921.		1911.	
	Male.	Female.	Male.	Female.
0—5	1,202	1,316	1,327	1,433
5—10	1,471	1,494	1,383	1,383
10—15	1,245	1,081	1,165	997
15—20	842	815	848	826
20—25	775	881	822	930
25—30	865	885	896	909
30—35	825	833	829	835
35—40	636	565	622	556
40—45	621	621	634	631
45—50	392	346	380	338
50—55	434	438	432	443
55—60	185	168	177	164
60—65	266	298	257	305
65—70	81	79	83	75
70 & over	160	180	145	175
Mean age	24·8	24·7	24·7	24·7

In the whole of British India the infant death-rate amounts to about one-fifth of the total death-rate for all ages and about one-fifth of the children die before the age of one year. The ratios of deaths vary in different provinces the birth-rate being an important factor. Thus they are specially high in the United Provinces and Central Provinces where the birth-rate is high and low in Madras which has a lower general birth-rate. The recorded rates in some of the cities are phenomenally high but may, owing to the defective reporting of births, be somewhat exaggerated.

Special causes contribute to the high mortality of infants in India. Owing to the custom of early marriage co-habitation and child-birth commonly take place before the woman is physically mature and this, combined with the primitive and insanitary methods of midwifery, seriously affects the health and vitality of the mother and through her of the child. Available statistics show that over 40 per cent. of the deaths of infants occur in the first week after birth and over 60 per cent. in the first month. If the child survives the pre-natal and natal chances of congenital debility and the risks of child-birth, it is exposed to the dangers of death in the early months of life from diarrhœa or dysentery.

Infant mortality in Cities.

Bombay	556
Calcutta	386
Rangoon	303
Madras	282
Karachi	249
Delhi	233

Sex Ratio.—In the whole of India there is an excess of males over females, the figures being 945 females per thousand males. These results being opposed to experience in most other countries of the world have been challenged and attributed to errors in the Indian census. This reasoning is rejected by the Census authorities, who insist that the disparity between the sexes is due to special conditions in the Indian Empire. The sex ratio has fallen in the last twenty years throughout India. The statistics of birth suggest that the proportion of females born to males born has, if anything, declined during this period, and in any case there has been a marked decline in the last five years of the last decade in most provinces. The decline in the proportion of women however is chiefly due to (*a*) the absence of famine mortality which selects adversely to males and (*b*) the heavy mortality from plague and influenza which has selected adversely to females.

Marriage.—The subject of polygamy has been discussed fully in the report of 1911. Both Hindus and Muhammadans are allowed more wives than one, Muhammadans being nominally restricted to four. As a matter of practice polygamy is comparatively rare owing to domestic and economic reasons and has little effect on the statistics. The table shows the number of married women per 1,000 married men in India and the main provinces. No definite conclusions however can be drawn from these figures because (1) they probably contain a certain number of widows, divorces and prostitutes who have wrongly returned as married and (2) it is impossible accurately to gauge the effect of migration on the figures of the married in any area. The custom of polyandry is recognized as a regular institution among some of the tribes of the Himalayas and in parts of south India. It is also practised among many of the lower castes and aboriginal tribes. Its effect is reflected in the statistics of a few small communities such as the Buddhists of Kashmir where the proportion of married women to married men is exceptionally low, but otherwise the custom is of sociological rather than of statistical interest.

Number of married females per 1,000 *males.*

India	1,008
Assam	976
Bengal	966
Bihar and Orissa	1,034
Bombay	987
Burma	924
C.P. and Berar	1,024
Madras	1,061
Punjab	1,021
United Provinces	1,013

Widows.—The proportion of widowers in the populations, *viz.*, 6·4 per cent., does not differ widely from the figure for European countries, but the number of widows is strikingly

large. The large number of Indian widows is due partly to the early age of marriage, partly to the disparity in the ages of the husbands and wives but chiefly to the prejudice against the remarriage of widows. The higher castes of Hindus forbid it altogether and, as the custom is held to be a mark of social respectability many of the more ambitious of the lower castes have adopted it by way of raising their social status, while Muhammadans who are closely brought into touch with their Hindu neighbours are apt to share the prejudice

Proportion of widows in the population per 1,000.

Age.	India, 1921	England and Wales, 1911	Age.	India, 1921	England and Wales, 1911
All ages	175·0	73·2	20—25	71·5	1·5
0—5	·7	..	25—35	146·9	13·1
5—10	4·5	..	35—45 . ..	325·2	50·5
10—15	16·8	..	45—65	619·4	193·3
15—20	41·4	..	65 and over	834·0	565·9

Early Marriage.—The figures clearly show an increase in the numbers of those in the early age-categories who are still unmarried. The movement is most marked in the Hindu community but is shared by the other religions, the change being less noticeable among the Buddhist and Christian communities who are not addicted to early marriage. The change is most conspicuous in the age-categories 10 to 15 for women and 10 to 20 for men.

SOCIAL AND ECONOMIC CONDITIONS.

Literacy.—The number of persons in India Literate in the sense of being able to write a letter and read the reply is 22·6 millions, amounting, if children under five years of age are excluded, to 82 in every thousand of the population. Of males 139 in every thousand at age five and above are eliterate, the corresponding proportion in the case of females being 21.

The Hindus have one literate person in every thirteen; for males the ratio is one in eight and for females one in sixty-three. The proportion of Sikh males who are literate is less than that of Hindus. One Mahomedan male in 11 and one female in 116 can read and write. The low position of Musalmans is partly due to the fact that in Bengal, the Punjab, North-West Frontier Province and Sind, where they predominate, they are mostly agricultural. Where they are in a minority, as in the Central Provinces, United Provinces and Madras, they are usually town-dwellers and have a considerably higher proportion of literates. The Hindu community embraces every stratum of society and the proportion of literacy is seriously affected by the inclusion of the vast mass of the lower rural classes. Some of the higher Hindu castes have more literate males than the Parsis whilst others are on a level with or even below the aboriginal tribes.

English.—In the whole of India 2·5 million persons or 160 males and 18 females in every ten thousand persons of each sex aged five and over can read and write English.

One in thirty males in Bengal and one in forty-three in Bombay are literate in English. In Madras, Assam and Burma the proportion is 2 per cent. while in Bihar and Orissa, the Central Provinces and the United Provinces it is below 1 per cent. Of the States Cochin and Travancore have between 3 and 4 per cent., but in others the proportions are much lower. More than half the number of Parsi males and one-fourth of their females can read and write English. Of Christians nearly all the Europeans and many of the Anglo-Indian are literate in English; but except on the southern coast English literacy is rare among the Indian Christians and the regional proportions therefore largely follow the racial distribution. Though the proportions in the other communities, taken on the total populations, are small, some of the higher castes have a fairly large number of English-knowing members. In Bengal about half of the Baidya males and a quarter of the Brahman and Kayastha males are literate in English, while in Madras more than a quarter of the Tamil Brahmans can claim this accomplishment. Of the Jain in Kathiawar nearly a tenth are literate in English though the Chaturth Jains of Kolhapur, who are cultivators, are less literate than the average of the Presidency. During the decade the number of males knowing English rose by 51 per cent. and that of females by 57 per cent. Among the main Provinces the greatest progress has been made by Bengal, Assam and Bombay and in the States by Cochin, Travancore, Mysore and Baroda.

Languages.—In the whole Indian Empire 222 languages were returned at the census, dialects, as has been previously explained, not having been separately considered. The

principal languages are given in the following statement:—

Language.	Number of speakers in (000's omitted). 1921.	1911.	Percentage of increase or decrease.
Western Hindi ..	96,714	96,041	+ 1
Bengali	49,294	48,368	+ 2
Telugu	25,601	23,543	+ 2
Marathi	18,798	19,807	— 5
Tamil	18,780	18,128	+ 4
Panjabi	16,234	15,877	+ 2
Rajasthani ..	12,681	14,068	—10
Kanarese	10,374	10,526	— 1
Oriya	10,143	10,162	—·2
Gujarati	9,552	9,238	+ 3
Burmese	8,423	7,894	+ 7
Malayalam ..	7,498	6,792	+10
Lahnda or Western Panjabi ..	5,652	4,779	+18

The necessity of a common medium of conversation and intercourse, which has given rise to bi-lingualism and the consequent displacement of tribal languages, has formed the subject of a considerable amount of discussion and suggestion during the last decade and a good deal has been written on the possibility of a *lingua franca* for India. The combined speakers of Eastern and Western Hindi considerably exceed in number the strength of any other individual language in India, and if we add to these two languages Bihari and Rajasthani, which so resemble Hindi as to be frequently returned under that name in the census schedules, we get well over 100 millions of speakers of tongues which have some considerable affinities and cover a very large area of northern and central India. In their pure forms these four languages may be scientifically distinct; but this is not the popular view. There is a common element in the main languages of northern and central India which renders their speakers, without any great conscious change in their speech mutually intelligible to one another, and this common basis already forms an approach to a *lingua franca* over a large part of India.

Infirmities.—These are classes under four main heads—insanity, deaf-mutism, blindness and leprosy. The appended statement shows the number of persons suffering from each infirmity at each of the last five censuses and the proportion per hundred thousand of the population:—

Infirmity.	NUMBER AFFLICTED WITH RATIO PER HUNDRED THOUSAND OF THE POPULATION. 1921.	1911.	1901.	1891.	1881.
Insane	88,305 28	81,006 26	66,205 23	74,279 27	81,132 35
Deaf-mutes..	189,644 60	199,891 64	153,168 52	196,861 75	197,215 86
Blind	479,637 152	443,653 142	354,104 121	458,868 167	526,748 229
Lepers	102,513 32	109,094 35	97,340 33	126,244 46	131,968 57
TOTAL ..	860,099 272	833,644 267	670,817 229	856,252 315	937,063 407

There had been a continuous decline in the total number as well as in the proportion of persons recorded as afflicted up to 1901. This fall has been ascribed, partly, to a progressive improvement in the accuracy of the diagnosis and, partly, to an actual decrease in the prevalence of the infirmities, owing to the improvement in the material condition of the people to better sanitation and (especially in the case of blindness) to the increasing number of cures effected with the aid of modern medical and surgical science. In the decade ending 1901 the relatively high mortality of the afflicted in the two severe famines must have been a considerable factor in the decline shown at that census, but the method of compilation adopted in 1901 and in the previous census was defective, and, certainly in 1901, many of the persons afflicted must have escaped notice in the course of tabulation. Compared with the year 1891, there was a slight decrease in the total number of persons recorded as afflicted in 1911, the proportion per hundred thousand persons falling from 315 to 267. The small increase in the present decade, amounting to 26,455 persons or one per 100,000 may be due to improvement in record and tabulation but is certainly unexpected.

Caste.—The enormous complexity of the caste system makes it impossible to give more than the briefest results here; the curious must be referred to the extensive literature on the subject, and to the whole chain of census reports where it is discussed in various aspects. All we can do here is to give the census figures of the main castes, with a comparison with 1911.

Variation in certain main castes.

Caste.	Persons. 1921	Persons. 1911
Ahir	9,032,861	9,481,194
Arain	1,119,486	998,222
Babhan	1,167,373	1,264,379
Bagdi	895,397	1,015,738
Balija	1,042,097	1,041,246
Baluch	1,324,053	1,334,756
Baniya	2,726,007	2,085,427
Banjara	651,927	866,020
Barhai	969,047	1,033,879
Bhil	1,795,808	1,590,690
Brahman	14,254,991	14,568,472
Burmese	8,370,152	7,643,742
Chamar	11,224,557	11,448,786
Chuhra	1,146,779	1,254,150
Dhobi	2,020,531	2,029,495
Dosadh	1,167,686	1,189,274
Fakir	790,714	865,511
Gadaria	1,299,770	1 340,631
Golla	1,416,758	1,515,794
Gond	2,902,592	2,995,598
Gujar	2,179,485	2,195,168
Hajjam	2,905,724	2,972,928
Jat	7,374,817	6,887,655
Jolaha	2,698,132	2,799,623
Kachhi	1,228,590	1,281,515
Kahar	1,707,223	1,726,546
Kaibartta	2,877,758	2,711,960
Kamma	1,160,984	1,126,095
Kammalan	1,288,711	1,047,585
Kapu	3,379,328	3,327,179
Karen	1,042,131	1,102,695
Kayastha	2,312,235	2,133,313
Kewat	1,150,427	1,129,799
Koiri	1,680,615	1,726,977
Koli	2,499,014	3,164,968
Kori	837,025	900,062
Kumhar	3,353,029	3,423,942
Kunbi	3,194,694	4,512,182
Kurmi	3,574,808	3,707,090
Lingayat	2,738,214	2,968,440
Lodha	1,616,662	1,703,556
Lohar	1,546,313	1,517,587
Kamar	779,886	786,431
Madiga	1,687,857	1,920,462
Mahar	3,002,516	3,325,712
Mal	1,986,414	2,067,521
Mali	1,875,610	1,939,869
Mappilla	1,108,385	1,044,557
Maratha	6,566,334	4,972,954
Mochi	923,714	926,426
Namasudra	2,172,823	2,082,547

Variation in certain main castes—*contd.*

Caste.	Persons.	
	1921	1911
Nayar	1,311,112	1,127,264
Palli	2,809,969	2,820,161
Paraiyan	2,407,309	2,447,370
Pasi	1,488,582	1,461,902
Pathan	3,547,868	3,629,534
Rajbansi	1,818,674	1,914,868
Koch	360,602	367,100
Rajput	9,772,518	9,400,885
Saiyid	1,601,247	1,544,629
Santal	2,265,282	2,127,878
Sheikh	33,387,909	31,851,028
Sindhi	858,054	1,697,486
Sonar	1,137,611	1,180,624
Teli or Tili	4,159,479	4,178,145
Vakkaliga	1,302,552	1,346,758
Vellala	2,716,359	2,592,282

There has been much discussion of recent years of the position and numbers of "The Depressed Classes"—a term which has never been accurately defined, but which may be described as the classes outside the pale of Hindu Society. Their numbers are given in the census as between 55 and 60 millions.

The main figure of Europeans and Anglo-Indians are given below :—

Province, State or Agency.	European and Allied Races in 1921.			Total European and Allied Races in 1911.	Anglo-Indians.	
	British Subjects.	Others.	Total.		1921.	1911.
India	163,918	10,139	174,057	197,639	113,012	100,420
Provinces	148,525	9,124	157,649	178,130	96,529	86,196
States and Agencies	15,393	1,015	16,408	19,509	16,483	14,224

OCCUPATIONS.

India is essentially an agricultural country and agriculture proper supports 224 millions of persons or 71 per cent. of the population of the Empire. If we add the pastoral and hunting occupations the percentage rises to 73, while a considerable proportion of the unfortunately large number of persons in the category of vague and unclassifiable occupations are probably labourers closely connected with the occupations of the land. Industries support 10 per cent. of the population, but the bulk of these are engaged in unorganised industries connected with the supply of personal and household necessities and the simple implements of work. Organized industries occupy only 1 per cent. of the people. In trade and transport, on which less than 6 per cent. and 2 per cent., respectively, depend a not inconsiderable number are connected with the disposal of the various kinds of agricultural products. The administration and protection of the country engage only 4,825,479 persons, or 1½ per cent. of the population, and the remainder are supported by domestic, miscellaneous and unproductive occupations. Though the extent to which agriculture predominates in individual provinces varies, there is no region in which it does not in some form easily take the first place.

In spite of the trade of Calcutta and the numerous industrial and mining concerns of Bengal and Bihar and Orissa the population of the eastern provinces is overwhelmingly agricultural and contains a higher percentage of persons supported by the land than any other tract of India. Of industrial workers the largest proportions in the local population are in the Punjab, the United Provinces and Bombay. Of these three provinces, however, agriculture dominates the economic life of the first two, where the industrial occupations, though they engage a substantial number of persons, are mostly of the cottage industry type. In Bombay the development of organized industry is of some economic importance, but is at present largely confined to a few of the biggest cities. In the category of unclassified occupations the majority of persons are labourers whose particular form of labour is unspecified and the rest mostly unspecified clerks.

Compared with 1911 the agriculturists have increased a little faster than the total population, though fishermen and hunters are fewer. Miners have risen in number with the recent expansion of the industry. Industries have substantially decreased and of the principal forms of industry the textile workers have dropped considerably, as also have potters and workers in wood and metal. An increase under transport by rail is countered by a drop under transport by road. Trade has increased, trade in textiles showing a slight rise and trade in food a slight drop. The number employed in public administration is practically stationary, but the army has risen while the police has fallen heavily. Law and medicine have gained at the expense of religion, and though instruction has spread letters have fallen. Rentiers are fewer and domestic servants as many. Beggars and vagrants, the raw material of crime and disease, have decreased but criminals, the finished article, have risen in numbers.

Occupation or means of Livelihood.

Occupation.	Number of persons supported.
INDIA	316,055,231
Pasture and agriculture	229,045,019
Fishing and hunting	1,607,331
Mines, quarries, salt, etc.	542,053
Industry	33,167,018
Textiles	7,847,829
Dress and toilet	7,425,213
Wood	3,613,583
Food Industries	3,100,361
Ceramics	2,215,041
Building industries	1,753,720
Metals	1,802,208
Chemicals, etc.	1,194,263
Hides, skins, etc.	731,124
Other industries	3,483,676
Transport (including postal, telegraph and telephone services)	4,331,054
Trade	18,114,622
Hotels, cafes, etc., and other trade in foodstuffs	9,988,983
Trade in textiles	1,286,277
Banks, exchange, insurance, etc.	993,492
Other trades	5,845,870
Army and Navy	757,954
Air force	1,033
Police	1,422,610
Public administration	2,643,882
Professions and liberal arts	5,020,571
Religion	2,457,614
Instruction	805,228
Medicine	659,583
Others	1,098,146
Domestic Service	4,570,151
All others	14,831,933

NOTE.—Occupation was not recorded for 2,887,249 persons.

Collieries.—Of a total of 288 thousand supported by collieries 205 thousand are actual workers. The most important coal mines lie in the provinces of Bihar and Orissa and Bengal. The Jherria coal-field in Manbhum, the importance of which is due to its accessibility and the superior quality of its coal, alone produces over fifty per cent. of the total annual output of coal in India. According to the industrial census the total population employed in the coal mines of Manbhum was 82,619, of whom 347 were managers, 1,519 belonged to the supervising and technical staff and 1,482 to the clerical staff, while 32,843 were skilled and 46,428 unskilled workers.

Textiles—Cotton.—Of the industries the textile industries are by far the most importants the number of persons occupied in industries connected with cotton being returned as 5,872,000 or just three-quarters of the whole number of those supported by textile industries.

The bulk of the organized establishments are in the western tracts, where the large cities owe a considerable portion of their prosperity to the development of the textile industries and the cotton-growing country is covered with mechanically worked gins and presses for the preliminary treatment of the raw material. Of the 2,037 establishments connected with cotton manufacture, employing in all 434,000 persons, no less than 737 establishments, with 277,000 employees or 64 per cent. of the personnel, belong to the western Presidency and its States.

Jute.—The spinning, pressing and weaving of jute support a population of 493,099, as compared with 362,369 ten years ago. There are a few mills and presses in Assam, Bihar and Orissa, and Madras, but the industry is practically confined to Bengal.

Nature of Ownership.—Of the total number of 15,606 establishments 677 are owned by Government, 3,292 by registered companies and 11,637 by private persons. The Government owned concerns are mostly railway and engineering workshops and other concerns such as brick and tile factories connected with the construction of roads and building and printing presses. The tea and rubber plantations are mostly the property of companies. Out of the 795 tea plantations in Assam 632 belong to companies. On the other hand the coffee plantations of Madras, which are much smaller concerns than the tea gardens, are mostly privately owned, only 23 out of 127 belonging to companies in Madras and 10 out of 242 in Mysore. The collieries are mostly company-owned, but of the 42 manganese mines of the Central Provinces half are owned by companies and half by private persons. Of the 392 cotton ginning mills in Bombay 333 are private owned, but of the cotton weaving mills 129 out of 345 are owned by companies. Similarly the jute presses are mostly private, while 60 out of the 62 jute mills of Bengal are company owned. Practically all the printing presses are private concerns, and so are a large number of the general workshops and such concerns like flour and rice mills and brick and tile works, which are mostly on a small scale. European companies own the majority of the tea gardens of Assam and Bengal, but as has already been seen Indian enterprise is growing in regard to the private ventures. Indigo in Bihar and Orissa, coffee in Madras and rubber in Travancore are mostly in European hands but the coffee plantations of Mysore are largely owned by Indians. Most of the large collieries of Bengal are held by European companies, but 65 out of the 73 private concerns belong to Indians. The cotton industry of Western India is almost entirely Indian; while the jute mills of Bengal are in European hands though the small presses are mostly owned by Indians. The rice and flour mills and the brick and tile factories, with the exception of a few large concerns, are in the hands of Indians.

Women as Workers.—The adult women (unskilled) number 508 per 1,000 adult men and the proportion of the children of both sexes under 14 years old is 140 per 1,000 adults. By far the majority of women labourers, *viz.*, 322 out of 540 thousand, are on the plantations, where their proportion per 100 men is as high as 94, the children being 190 per 1,000 adults. Women and children are also numerous in the textile and mining industries and in the former there are 408 adult women (unskilled) per 1,000 men and in the latter 521. Nearly 30 per cent. of the women employed in textile industries are recorded as skilled. About 61 per cent. of the total number of children employed in organized industries are boys and the girls almost equal the boys on the plantations and in the mines and form about one-fifth of the child labour in the textile industries. In the larger industries (20 persons and above) both female and child labour has dropped since 1911, the proportion of women (unskilled) being 515 now against 561 in 1911 per 1,000 men and the proportion of children per 1,000 adults 141 against 191 in 1911. The figures vary curiously in different industries and suggest that they are not altogether trustworthy. Women have increased in the plantations and textiles and declined in the mines. Children have decreased in the plantations and textiles and increased in the mines. Both women and children find considerable employment in the establishments connected with glass, pottery, cement and building and to a less extent in those of food and dress.

Occupation of Europeans.—Of the 103,405 male Europeans, 63,538 belong in some capacity to the category of Public Force, *i.e.* the Army, Navy, Air Force and Police; over 9,000 to Transport, *i.e.*, largely railway officials and about 6,000 to Public Administration; 4,600 to Mines and Industries; 5,900 to professions; 4,600 to trade, while there are about 4,200 imperfect entries, a number which together with the known deficiency in the census of Europeans generally somewhat detracts from the value of the details. The abnormal constitution of the foreign European population is exhibited by the small number of dependants *viz.*, 62,000, as against 111,000 workers, whereas the number of Anglo-Indian dependants is just about double the number of their workers. Nearly one-third of the Anglo-Indian males are employed on Transport, *i.e.*, chiefly Railway, and the remainder mostly find employment as clerks and upper subordinates.

Manners and Customs.

Next to the complexion of the people, which varies from fair to black, the tourist's attention in India is drawn by their dress and personal decoration. In its simplest form a Hindu's dress consists of a piece of cloth round the loins. Many an ascetic, who regards dress as a luxury, wears nothing more, and he would dispense with even so much if the police allowed him to. The Mahomedan always covers his legs, generally with trousers, sometimes with a piece of cloth tied round the waist and reaching to the ankles. Hill men and women, who at one time wore a few leaves before and behind and were totally innocent of clothing, do not appear to-day within the precincts of civilisation and will not meet the tourist's eye. Children, either absolutely nude or with a piece of metal hanging from the waist in front, may be seen in the streets in the most advanced cities, and in the homes of the rich. The child Krishna, with all the jewels on his person, is nude in his pictures and images.

Dress.—The next stage in the evolution of the Hindu dress brings the loincloth nearly down to the feet. On the Malabar coast, as in Burma, the ends are left loose in front. In the greater part of India, they are tucked up behind—a fashion which is supposed to befit the warrior, or one end is gathered up in folds before and the other tucked up behind. The simplest dress for the trunk is a scarf thrown over the left shoulder, or round both the shoulders like a Roman toga. Under this garment is often worn a coat or a shirt. When an Indian appears in his full indigenous dress, he wears a long robe, reaching at least down to the calves: the sleeves may be wide, or long and sometimes puckered from the wrist to the elbow. Before Europeans introduced buttons, a coat was fastened by ribbons, and the fashion is not obsolete. The Mahomedan prefers to button his coat to the left, the Hindu to the right. A shawl is tied round the waist over the long coat, and serves as a belt, in which one may carry money or a weapon, if allowed. The greatest variety is shown in the head-dress. More than seventy shapes of caps, hats, and turbans, may be seen in the city of Bombay. In the Punjab and the United Provinces, in Bengal, in Burma and in Madras other varieties prevail. Cones and cylinders, domes and truncated pyramids, high and low, with sides at different angles: folded brims, projecting brims: long strips of cloth wound round the head or the cap in all possible ways, ingenuity culminating perhaps in the "parrot's beak" of the Maratha turban—all these fashions have been evolved by different communities and in different places, so that a trained eye can tell from the head-covering whether the wearer is a Hindu, Mahomedan or Parsi, and whether he hails from Poona or Dharwar, Ahmedabad or Bhavnagar.

Fashion Variations.—Fashions often vary with climate and occupation. The Bombay fisherman may wear a short coat and a cap, and may carry a watch in his pocket; yet, as he must work for long hours in water, he would not cover his legs, but suspend only a coloured kerchief from his waist in front. The Pathan of the cold north-west affects loose baggy trousers, a tall head-dress befitting his stature and covers his ears with its folds as if to keep off cold. The poorer people in Bengal and Madras do not cover their heads, except when they work in the sun or must appear respectable. Many well-to-do Indians wear European dress at the present day, or a compromise between the Indian and European costumes; notably the Indian Christians and Parsis. Most Parsis however have retained their own head-dress, and many have not borrowed the European collar and cuffs. The majority of the people do not use shoes: those who can afford them wear sandals, slippers and shoes, and a few cover their feet with stockings and boots after the European fashion in public.

Women's Costumes.—The usual dress of a woman consists of a long piece of cloth tied round the waist, with folds in front, and one end brought over the shoulder or the head. The folds are sometimes drawn in and tucked up behind. In the greater part of India women wear a bodice: on the Malabar coast many do not, but merely throw a piece of cloth over the breast. In some communities petticoats or drawers, or both are worn. Many Mussalman ladies wear gowns and scarfs over them. The vast majority of Mahomedan women are *gosha* and their dress and persons are hidden by a veil when they appear in public: a few converts from Hinduism have not borrowed the custom. In Northern India Hindu women have generally adopted the Mussalman practice of seclusion. In the Dekhan and in Southern India they have not.

As a rule the hair is daily oiled, combed, parted in the middle of the head, plaited and rolled into a chignon, by most women. Among high caste Hindu widows sometimes shave their heads in imitation of certain ascetics, or monks and nuns. Hindu men do not, as a rule, completely shave their heads. Mahomedans in most cases do. The former generally remove the hair from a part of the head in front, over the temples, and near the neck, and grow it in the centre, the quantity grown depending upon the fancy of the individual. Nowadays many keep the hair cropped in the European fashion, which is also followed by Parsis and Indian Christians. Most Mussalmans grow beards, most Hindus do not, except in Bengal and elsewhere, where the Mahomedan influence was paramount in the past. Parsis and Christians follow their individual inclinations. Hindu ascetics, known as Sadhus or Bairagis as distinguished from Sanyasis, do not clip their hair, and generally coil the uncombed hair of the head into a crest, in imitation of the god Shiva.

Hindu women wear more ornaments than others of the corresponding grade in society. Ornaments bedeck the head, the ears, the nose, the neck, the arms, wrists, fingers, the waist—until motherhood is attained, and by some even later—and the toes. Children wear anklets. Each community affects its peculiar ornaments, though imitation is not uncommon. Serpents with several heads, and flowers, like the lotus, the rose, and the champaka, are among the most popular object of representation in gold or silver.

Caste Marks.—Caste marks constitute a modest personal decoration peculiar to Hindus, especially of the higher castes. The simplest mark is a round spot on the forehead. It represents prosperity or joy, and is omitted in mourning and on fast-days. It may be red, or yellowish as when it is made with ground sandalwood paste. The worshippers of Vishnu draw a vertical line across the spot, and as Lakshmi is the goddess of prosperity, it is said to represent her. A more elaborate mark on the forehead has the shape of U or V, generally with the central line, sometimes without it, and represents Vishnu's foot. The worshippers of Shiva adopt horizontal lines, made with sandalwood paste or ashes. Some Vaishnavas stamp their temples, near the corners of the eyes, with figures of Vishnu's conch and disc. Other parts of the body are also similarly marked. The material used is a kind o. yellowish clay. To smear the arms and the chest with sandalwood paste is a favourite kind of toilet, especially in the hot season. Beads of Tulsi or sacred Basil, and berries of Rudraksha *elæocarpus ganitrus*, strung together are worn round their necks by Vaishnavas and Shaivas. respectively. The Lingayats, a Shaiva sect, suspend from their necks a metallic casket containing the Linga or phallus of their god. Bairagis, ascetics, besides wearing Rudraksha rosaries round their necks and matted hair, smear their bodies with ashes. Religious mendicants suspend from their necks figures of the gods in whose name they beg. Strings of cowries may also be seen round their necks. Muslim dervishes sometimes carry peacock's feathers.

Hindu women mark their foreheads with a red spot or horizontal line. High caste widows are forbidden to exhibit this sign of happiness, as also to deck themselves with flowers or ornaments. Flowers are worn in the chignon. Hindu women smear their faces, arms, and feet sometimes with a paste of turmeric, so that they may shine like gold. The choice of the same colour for different purposes cannot always be explained in the same way. The red liquid with which the evil eye is averted may be a substitute for the blood of the animal slaughtered for the purpose in former times. In many other cases this colour has no such associations. The Muslim dervish affects green, the Sikh Akali is fond of blue, the Sanyasi adopts orange for his robe, and no reason can be assigned with any degree of certainty.

Shiva.—India is a land of temples, mosques and shrines, and the Hindu finds at every turn some supernatural power to be appeased. Shiva has the largest number of worshippers. He has three eyes, one in his forehead, a moon's crescent in his matted hair, and at the top of the coil a woman's face representing the river Ganges. His abode is the Mount Kailas in the Himalayas, from which the river takes its source. Round his neck and about his ears and limbs are serpents, and he also wears a necklace of skulls. In his hands are several weapons, especially a trident, a bow, and a thunderbolt, and also a drum which he sounds while dancing for he is very fond of this exercise. He sits on a tiger's skin, and his vehicle is a white bull. His wife Parvati and his son Ganesha sit on his thighs. An esoteric meaning is attached to every part of his physical personality. The three eyes denote an insight into the past, present and future: the moon, the serpents, and the skulls denote months, years and cycles, for Shiva is a personification of time, the great destroyer. He is also worshipped as a Linga or phallus which represents creative energy.

Ganpati.—Ganesh or Ganpati, the controller of all powers of evil subject to Shiva, is worshipped by all sects throughout India. Every undertaking is begun with a prayer to him. He has the head of an elephant, a large abdomen, serpents about his waist and wrists, several weapons in his hands, and a piece of his tusk in one hand. He is said to have broken it off when he wanted to attack the moon for ridiculing him. The different parts of his body are also esoterically explained. His vehicle is a rat.

Parvati.—Parvati, the female energy of Shiva, is worshipped under various names and forms. She is at the head of all female supernatural powers, many of whom are her own manifestations. Some are benign and beautiful, others terrible and ugly. Kali, the tutelary deity of Kalighat or Calcutta, is one of her fierce manifestations In this form she is black: a tongue smeared with blood projects from her gaping mouth: besides her weapons, she carries corpses in her hands, and round her neck are skulls. Bombay also takes its name from a goddess, Mumbadevi. Gouri, to whom offerings are made in Indian homes at an annual festival, is benign. On the other hand the epidemic diseases like the plague and smallpox are caused by certain goddesses or "mothers."

Vishnu, the second member of the Hindu trinity, is the most popular deity next to Shiva. He is worshipped through his several incarnations as well as his original personality. His home is the ocean of milk, where he reclines on the coils of a huge, many-headed serpent. At his feet sits Lakshmi, shampooing his legs. From his navel issues a lotus, on which is seated Brahma, the third member of the trinity. In his hands are the conch, which he blows on the battlefield, and the disc, with which the heads of his enemies are severed. Round his neck are garlands of leaves and flowers, and on his breast are shining jewels. As Shiva represents destruction, Vishnu represents protection, and his son is the god of love. To carry on the work of protection, he incarnates himself from time to time, and more temples are dedicated nowadays to his most popular incarnations, Rama and Krishna, than to his original personality. Rama is a human figure, with a bow in one of his hands. He is always accompanied by his wife Sita, often by his brother Lakshmana, and at his feet, or standing before him with joined hands, is Hanuman, the monkey chieftain, who assisted him in his expedition against Ravana, the abductor of his wife. Krishna is also a human figure, generally represented as playing on a flute, with which he charmed the damsels of his city, esoterically explained to mean his devotees.

Brahma is seldom worshipped: only a couple of temples dedicated to him have yet been discovered in all India.

Minor Deities—The minor gods and goddesses and the deified heroes and heroines who fill the Hindu pantheon, and to whom shrines are erected and worship is offered, constitute a legion. Many of them enjoy a local reputation, are unknown to sacred literature, and are worshipped chiefly by the lower classes. Some of them, though not mentioned in ancient literature, are celebrated in the works of modern saints.

The **Jains** in their temples, adore the sacred personages who founded and developed their sect, and venerate some of the deities common to Hinduism. But their view of Divinity is different from the Hindu conception, and in the opinion of Hindu theologians they are atheists. So also the **Buddhists** of Burma pay almost the same veneration to Prince Siddhartha as if he was a god, and indeed elevate him above the Hindu gods, but from the Hindu standpoint they are also atheists.

Images—Besides invisible powers and deified persons, the Hindus venerate certain animals, trees and inanimate objects. This veneration must have originated in gratitude, fear, wonder, and belief in spirits as the cause of all good or harm. Some of the animals are vehicles of certain gods and goddesses—the eagle of Vishnu: the swan of Brahma: the peacock of Saraswati: Hanuman, the monkey of Rama: one serpent upholds the earth, another makes Vishnu's bed: elephants support the ends of the universe, besides one such animal being Indra's vehicle: the goddess Durga or Kali rides on a tiger: one of Vishnu's incarnations was partly man and partly lion. The cow is a useful animal: to the Brahman vegetarian her milk is indispensable, and he treats her as his mother. So did the Rishi of old, who often subsisted on milk and fruits and roots. To the agriculturist cattle are indispensable. The snake excites fear. Stones, on which the image of a serpent is carved, may be seen under many trees by the roadside. The principal trees and plants worshipped are the Sacred Fig or Pipal, the Banyan, the Sacred Basil, the Bilva or Wood Apple, the Asoka, and the Acacia. They are in one way or another associated with some deity. The sun, the moon, and certain planets are among the heavenly bodies venerated. The ocean and certain great rivers are held sacred. Certain mountains, perhaps because they are the abodes of gods and Rishis, are holy. Pebbles from the Gandaki and the Narmada, which have curious lines upon them, are worshipped in many households and temples.

Worship.—Without going into a temple, one can get a fair idea of image worship by seeing how a serpent-stone is treated under a tree. It is washed, smeared with sandal, decorated with flowers: food in a vessel is placed before it, lamps are waved, and the worshipper goes round it, and bows down his head, or prostrates himself before the image. In a temple larger bells are used than the small ones that are brought to such a place: jewels are placed on the idol: and the offerings are on a larger scale. Idols are carried in public procession in palanquins or cars. The lower classes sacrifice animals before their gods and goddesses.

Domestic Life.—Of the daily domestic life of the people a tourist cannot see much. He may see a marriage or funeral procession. In the former he may notice how a bridegroom or bride is decorated: the latter may shock him, for a Hindu dead body is generally carried on a few pieces of bamboo lashed together: a thin cloth is thrown over it and the body is tied to the frame. The Mahomedan bier is more decent, and resembles the Christian coffin. Some Hindus, however, carry the dead to the burial ground in a palanquin with great pomp. The higher castes cremate the dead: others bury them. Burial is also the custom of the Muslims, and the Parsis expose the dead in Towers of Silence.

Indian Names.

The personal name of most Hindus denotes a material object, colour, or quality, an animal, a relationship, or a deity. The uneducated man, who cannot correctly pronounce long Sanskrit words, is content to call his child, father, brother, uncle, or mother, or sister, as the case may be. This practice survives among the higher classes as well. Appa Saheb, Anna Rao, Babaji, Bapu Lal, Bhai Shankar, Tatacharya, Jijibhai, are names of this description, with honorific titles added. It is possible that in early society the belief in the re-birth of departed kinsmen lent popularity to this practice. Nothing could be more natural than to call a man white, black, or red: gold or silver: gem, diamond, ruby, pearl, or merely a stone: small or tall, weak or strong: a lion, a snake, a parrot, or a dog: and to name a woman after a flower or a creeper. Thus, to take a few names from the epics, Pandu means white, and so does Arjuna: Krishna black Bhima terrible: Nakula a mongoose: Shunaka a dog: Shuka a parrot: Shringa a horn. Among the names prevalent at the present day Hira is a diamond: Ratna or Ratan a jewel: Sonu or Chinna gold: Velli or Belli, in the Dravidian languages, means white metal or silver. Men are often called after the days of the week on which they were born, and hence they bear the names of the seven heavenly bodies concerned. When they begin to assume the names of the Hindu deities, they practically enter upon a new stage of civilisation. It is doubtful whether the Animists ever venture to assume the names of the dreaded spirits worshipped by them. To pronounce the name of a devil is to invite him to do harm. If the spirits sometimes bear the names of human beings, the reason seems to be that they were originally human.

High-caste practices.—The high caste Hindu, on the other hand, believes that the more often the name of a deity is on his lips, the more merit he earns. Therefore he deliberately names his children after his gods and goddesses, so that he may have the opportunity of pronouncing the holy names as frequently as possible. These are also sonorous and picturesque. Shiva is happy: Vishnu is a pervader: Govinda is the cowherd Krishna: Keshava has fine hair: Rama is a delighter: Lakshmana is lucky: Narayana produced the first living being on the primeval waters: Ganesha is the Lord of Shiva's hosts: Dinakara is the luminary that makes the day: Subrahmanya is a brother of Ganesha. Sita is a furrow: Saitri a ray of light: Tara a star: Radha prosperity: Rukmini is she of golden ornaments: Bhama of the glowing heart. Shiva and Vishnu has each got at least a thousand names, and they may be freely drawn upon and paraphrased in naming one's children; and the whole Hindu pantheon is as crowded as it is large. When a mother loses several children, she begins to suspect that some evil spirit has conspired against her and in order to make her off-spring unattractive to the powers of darkness, she gives them ugly names, such as Keru, rubbish, or Ukirda, dunghill, or Martoba, the mortal. Women are named after rivers, as Sarasvati, Ganga, Bhagirathi, Godavari, or Kaveri, just as men are sometimes called after mountains. Manu counsels young men not to choose a wife with such a name, perhaps because a river is an emblem of deviousness and inconstancy, as a hill is an emblem of stability. But the names of rivers have not been discarded. The Burmans have a curious custom: if a child is born on a Monday, its name must begin with a guttural, on Tuesday with a palatal, on Thursday with a labial, on Saturday wth a dental.

Family names.—When a person rises in importance, he adds to his personal name a family or caste name. It was once the rule that the title Sharma might be added to a Brahman's name, Varma to a Kshatriya's, Gupta to a Vaishyas, and Dasa to a Shudra's. This rule is fairly well observed in the case of the first two titles, but the meaning of the other two has changed. Dasa means a slave or servant, and the proudest Brahman cannot disdain to call himself the servant of some god. Thus, although Kalidas, the famous poet, was a Shudra, Ramadas, the famous guru of Shivaji, was a Brahmin. The Vaishnavas have made this fashion of calling oneself a servant of some god exceedingly popular, and in Western India high caste Hindus of this sect very commonly add Das to their names. The Brahmans of Southern India add Aiyer or Aiyangar to their names. Shastri, Acharya, Bhat, Bhattacharya, Upadhyaya, Mukhopadhyaya, changed in Bengal into Mukerji, are among the titles indicative of the Brahmanical profession of studying and teaching the sacred books. Among warlike classes, like the Rajputs and Sikhs, the title Singh (lion) has become more popular than the ancient Varma. The Sindhi Mal, as in Gidumal, means brave and has the same force. Raja changed into Raya, Rao and Rai was a political title, and is not confined to any caste. The Bengali family names, like Bose and Ghose, Dutt and Mitra, Sen and Guha, enable one to identify the caste of their bearers, because the caste of a family or clan cannot be changed. Shet, chief of a guild or a town, becomes Chetty, a Vaishya title, in Southern India. Mudaliyar and Nayudu, meaning leaders, are titles which were assumed by castes of political importance under native rulers. Nayar and Menon are the titles of important castes in Malabar. Ram, Lal, Nand, Chand, are among the additions made to personal names in Northern India. Suffixes like Ji, as in Ramji or Jamshedji, the Kanarese Appa, the Telugu Garu, the feminine Bai or Devi, are honorific. Prefixes like Babu, Baba, Lala, Sodhi, Pandit, Raja, and the Burmese Maung are also honorific.

Professional names.—Family names sometimes denote a profession: in some cases they might have been conferred by the old rulers. Mehta, Kulkarni, Deshpande, Chitnavis, Mahalnavis are the names of offices held in former times. One family name may mean a flour seller, another a cane-seller, and a third a liquor-seller. To insert the father's name between one's personal and the family name is a common practice in Western India. It is rare elsewhere. When a family comes from a certain place, the suffix 'kar' or 'wallah' is added to the name of the place and it makes a family surname in Western India. Thus we may have Chiplunkars and Suratwallahs, or without these affixes we may have Bhavnagris, Malabaris and Bilimorias, as among Parsis. Thus Vasudev Pandurang Chiplunkar would be a Hindu, whose personal name is Vasudev's father's name Pandurang, and family name derived from the village of Chiplun, is Chiplunkar. In Southern India the village name precedes the personal name. The evolution of Musalman names follows the same lines as Hindu names. But Muslims have no god or goddesses, and their names are derived from their religious and secular history. These names and titles are often as long and picturesque as Hindu appellations. The agnomens Baksh, Din, Ghulam, Khwaje, Fakir, Kazi, Munshi, Sheikh, Syed, Begum, Bibi and others, as well as honorific additions like Khan have meanings which throw light on Muslim customs and institutions. The Parsis also have no gods and goddesses, and their personal names are generally borrowed from their sacred and secular history. Their surnames frequently indicate a profession or a place, as in the case of Hindus in Western India. Batliwallah, Readymoney, Contractor, Saklatwallah, Adenwallah and others like them are tell-tale names.

Conversions.—As a rule, a child is named soon after it is born, and in the case of males the appellation is not changed. The higher Hindu castes have a separate ceremony called the name-giving ceremony performed on the twelfth day after birth. When a girl is married in these castes, the husband's family give her a new personal name. When a boy is invested with the sacred thread and is made a twice-born, his name is not changed, but when a man joins an order of ascetics, his lay name is dropped, and he assumes a new name. So also when a Burman joins an order of monks or nuns, the lay name is superseded by a Pali name. Christian converts change their original name when they are baptised.

Indian Art.

In India there has never been so marked a separation between what are now known as the Fine Arts, and those applied to industry as was the case in Europe during the nineteenth century. As, however, Industrial art forms the subject of a special article in this book, the term Indian Art will here be confined to Architecture, Sculpture and Painting.

Historical.—The degree of proficiency attained in art by Indians prior to B. C. 250, can only be conjectured by their advancement in literature; and by the indirect evidences of indebtedness shown by the works of the historic period, to those which preceded them; or direct records of artistic work of an earlier date than B. C. 250 do not exist. The chief historic schools of architecture are as follows:—

Name.	Dates.	Locality of the best Examples.
Buddhist	..B.C.250—A.D.750.	Ellora, Ajanta, Kali, Sanchi.
Jaina ..	..A.D.1000—1300.	Ellora, Mount Abu, Palitana.
Brahminical..	A.D. 500 to the present day.	Ellora, Elephanta, Orissa, Bhuvaneswar, Dharwar.
Chalukyan	..A.D.1000—1200.	Umber, Somnathpur, Ballur.
Dravidian	..A.D.1350—1750.	Ellora, Tanjore, Madura, Tinnevelly.
Pathan	..A.D.1200—1550.	Delhi, Mandu, Jaunpore.
Indo-Saracenic	A.D.1520—1760.	Lahore, Delhi, Agra, Amber, Bijapur.

Buddhist Architecture is mainly exemplified by the rock-cut temples and monasteries found in Western India and in the *Topes* or sacred mounds. The interior decorations, and external facades of the former, and the rails and gates surrounding the latter point unmistakably to their being derived from wooden structures of an earlier period. The characteristic features of these temples are horse-shoe openings in the facades to admit light, and collonades of pillars with richly ornamented caps in the interior halls. Jaina Architecture is found in its most highly developed form in the Dilwara temples at Mount Abu. The ground plan consists of a shrine for the god or saint; a porch, and an arcaded courtyard with niches for images. The characteristic of the style is grace and lightness, with decorative carving covering the whole interior, executed with great elaboration and detail. Constructional methods suggest that original types in wood have been copied in marble.

Brahminical, Chalukyan and Dravidian styles differ little in essential plan, all having a shrine for the god, preceded by pillared porches. The outer forms vary. The northern Brahminical temples have a curved pyramidal roof to the shrines, which in the southern or Dravidian style are crowned by a horizontal system of storied towers, and each story, decreasing in size, is ornamental with a central cell and figures in high relief. The Chalukyan style is affected by its northern and southern neighbours, taking features from each without losing its own special characteristics of which the star-shaped plan of the shrine, with the five fold bands of external ornament, is the principal feature. Pathan Architecture was introduced into India by the Mahomedan invasion of the thirteenth century. At old Delhi are fine examples in the Kutub Mosque and Minar. The characteristics of the style are severity of outline, which is sometimes combined with elaborate decoration due, it is stated, to the employment of Hindu craftsmen. The mosques and tombs at Ahmedabad already show Hindu influence; but purer examples are to be found at Jaunpore and Mandu. Indo-Saracenic Architecture reached the climax of its development during the reigns of the Moghul Emperors Akbar, Jehangir and Shah Jahan. It eclipsed in richness of material and refinement of taste the building efforts of previous periods, its crowning example being the Taj Mahal at Agra. The buildings erected during the Adil Shahi dynasty at Bijapur at a slightly later date exhibit a certain Turkish influence, especially in the great tomb of Mahmoud. Though less refined and lacking the attraction of precious materials in their decoration, these splendid edifices are held in higher esteem by some critics than those of the Moghals, on account of their simplicity, grandeur, and fine proportions. The era of great civil architecture in India was revived by the Mahomedan powers. Splendid palaces and fortresses were built at Madras, Delhi, Agra, Fattehpore-Sikri and Bijapur, and the example thus set was copied by the Hindu princes at Jaipur, Udaipur and elsewhere in India. The application of great architectural treatment, unequalled in extent elsewhere, is to be seen in the Ghauts or steps enclosing lakes and on the banks of rivers. The most notable constructional contribution of the Mahomedans to Indian architecture was the introduction of the true arch and dome.

Sculpture.—The use of sculpture and painting in isolated works of art was practically non-existent in India until modern times. One or two reliefs and certain gigantic figures may be quoted as exceptions, but taken generally it may be stated that these arts were employed as the decorative adjuncts of architecture. No civil statuary, such as is now understood by the term, was executed; for no contemporary portrait figures, or busts in marble, or bronze, have come down to us from the ruins of ancient India, as they have from those of Egypt, Greece and Rome. Sculpture has been used exclusively as the handmaid of religion, and to this fact may be attributed the stereotyped forms to which it became bound. The lavish use of sculpture on Indian temples often exceeds good taste, and mars the symmetry and dignity of their mass and outline; but for exuberance of imagination, industrious elaboration and vivid expression of movement, Indian sculpture is perhaps without its equal elsewhere in the world. The most impressive specimens are the earliest, found in the Buddhist and Brahminical cave temples of Ellora, Ajanta and Elephanta. The great Trimurthi in the last named of these temples ranks for mystery

and expressive grandeur with the greatest masterpieces of Egyptian art. The outstanding characteristics of Hindu sculpture are the power displayed in suggesting movement, the fine sense of decorative arrangements of line and mass; and an overpowering ingenuity in intricate design. Mahomedan sculpture in India, though not exclusively confined to geometric forms as is that of the more severe Arabian school, is very restrained as compared with that of the Hindus. Floral motifs are often used in the ornaments to tombs and palaces, but rarely in those of mosques. Their geometric ornament shows great ingenuity and invention; and wonderful decorative use is made of Persian, Arabic and Urdu lettering in panels, and their borders. The representation of human or animal figures is rarely to be met with. Sculptured and modelled relief is, as a rule, kept very low; and is mainly confined to the decoration of mouldings, architraves, lintels, or the bands of ornament which relieve large exterior wall spaces. Buildings of purely Mahomedan design and workmanship show greater restraint than those upon which Hindu workmen have been employed and are more satisfactory; but at Ahmedabad the two celebrated windows are striking examples of a happy combination of the two styles.

Painting.—Much of the carved stonework upon ancient Indian buildings was first plastered and then decorated with colour, but the only paintings, in the modern acceptation of the term, now existing, which were executed prior to the Moghul period, are those upon the walls of the cave temples at Ajanta. These remarkable works were produced at intervals during the first 600 years of the Christian era. They exhibit all the finer characteristic of the best Indian sculpture, but with an added freedom of expression due to the more tractable vehicle employed. They remained hidden in the Deccan jungles for nearly twelve hundred years, until accidentally discovered in 1816. They are painted in a species of fresco; and when first brought to light were well preserved, but they have greatly deteriorated owing to the well meant, but misguided action of copyists, and the neglect of the authorities. Their origin is as wrapt in mystery as is that of the artists who painted them; for no other paintings of similar power and character are known to exist; and the artists, so far as is known, left no successors. Nine hundred years elapsed between the completion of the Ajanta paintings and the commencement of the second period of Indian painting. This owned its origin to the introduction of Persian artists by the Moghul Emperor Akbar; and the establishment of the indigenous Moghul school was due to the encouragement and fostering care of his successors, Jehangir and Shah Jahan. Unlike the works of the Ajanta painters, which were designed upon a large scale, the pictures of the Moghul school were miniatures. They were executed in a species of opaque water-colour upon paper or vellum, resembling in technique the illuminated missals produced by the monks in Europe during the middle ages. Some of the finest of the earlier specimens in India are of a religious character; this phase of development being closely allied to the art the caligraphist. As its range extended, a remarkable school of portrait painters arose notable for restrained but extremely accurate drawing, keen insight into character, harmonious colour, fine decorative feeling, and extraordinary delicacy and finish in the painting of detail. The artists of a Hindu off-shoot of this movement, known as the Rajput school, were less fully endowed with the technical and purely aesthetic qualities than were the Moghul painters; but they brought to their work poetry and sentiment which are not to be found in that of the Mahomedans. The pictures of both branches of the Moghul school, although highly decorative in character, were not intended for exhibition upon the walls of rooms, according to Western practice, and, when not used as illustrations or decorations to manuscript books, were preserved in portfolios. As this school of painting was the last expression of traditional art in India, in the restricted sense here applied to the term, and, as the question has a distinct bearing upon the modern development of painting, a few words may be added regarding the difference between the conventions followed by Eastern and Western painters. Until the middle of the fourteenth century the conventions of both East and West were practically the same, though the use of them differed according to environment and national temperament. These conventions the artists of the East have retained; and development has been upon the line of decorative fitness, harmony of colour, and expressive action. Their art has throughout been decorative, and when natural objects have been depicted, their treatment has been that of a flat pattern. The European painters, after the period above mentioned on the contrary, sought to attain the appearance of actuality in the objects depicted by the study of the science of light and shade, and perspective; and in achieving this end, and developing it into the realisation of atmosphere and light, they sacrificed a large measure of the decorative quality which characterised the work of the earlier school. Eastern artists have ignored or been blind to light and shade; and in works entirely free from European influence one will look in vain for any suggestion of it in their figures or for shadows of objects cast upon the ground. During the last fifty years there has been a strong movement toward a return to decorative conventions, on the part of European artists who have assimilated much that the East has to teach them, without thereby affecting the distinctively Western character of their work. Indian and Japanese artists have been less successful when attempting the reverse of this practice, and appear to lose whatever is best in their traditional practice without acquiring the finer qualities of that of the West.

Modern Painting.—As the reign of Shah Jahan exhibits the high tide of artistic development in India, so the reign of his successor Aurangzeb marks the period of its rapid decline. The causes of this are attributable to the absence of encouragement by this Emperor; to his long periods of absence from the court at Delhi or Agra, entailed by the continuous wars he waged in his efforts to bring the whole of the Peninsula under his rule; and partly to the tendency strongly inherent in the Indian artist

to become stereotyped in his practice. All foreign designers, painters and craftsmen who had been attracted to India by the great works carried out by Akbar, Jehangir and Shah-Jahan left the country, and their places were taken by no successors. The indigenous artists left to themselves in the isolated courts of small Indian princes, or collected in schools in remote districts, employed themselves mainly upon repeating the works of a previous age, instead of seeking new motifs for artistic treatment. So purely mechanical did the work become that in some of the schools or guilds of painters, the execution of a single picture was subdivided; one craftsman painting the face, a second the drapery, and a third the background. Such methods could only lead to deterioration and decay. At the time when the British East India Company ceased to be only a guild of merchants and became a great administrative power in 1757, very little vitality survived in the ancient art of the country. During the century of its administrative history between the battle of Plassey and the Indian Mutiny, the "Company" was too fully occupied in fighting for its existence, extending its borders and settling the internal economy of its ever increasing territories, to be able to give much attention to conserving any remnant of artistic practice which had survived. Without any deliberate intention of introducing western art into the country, Greek and its derivative styles of architecture were adopted for public and private buildings in Calcutta, Bombay and Madras because these were found to be more suitable for their purpose than buildings of indigenous pattern. The practical result was the same; for the Indian craftsmen employed upon their erection were confronted with styles affording no scope for the application of their traditional ornament and concerning which they had no knowledge or sympathy. As there were no sculptors in India capable of modelling or carving civil sculpture, the monuments to distinguish public servants were all imported from England; and the portraits, or other paintings which decorated the interior walls of the buildings, were furnished by European painters who visited India or by artists in England. Although a considerable amount of research work of a voluntary nature was done by Archæologists, no official interest was taken in artistic education until the Government of India was transferred to the British Crown in 1859. In England itself, the first fifty years of the nineteenth century was a period of gross commercialism and artistic degradation; but with the advent of the International Exhibition of 1851 the eyes of the nation were opened to the value of art as applied to industry.

The **Schools of Art** then instituted throughout England were imitated in a timid and tentative manner in India: and were attached to the educational system, which had been previously modelled upon a definitely European basis. These schools of art, it should be remembered, were specially established to assist the artistic industries of the country, and not to provide instruction in architecture, sculpture and painting. In fact at a subsequent period they narrowly escaped extinction by the Secretary of State, upon the ground that they had become schools of painting and had thus been diverted from performing the original function for which they were established. The work of the Schools of Art in regard to industrial art is referred to elsewhere; and as two of them, that at Madras and that at Lahore, have confined their activities almost exclusively to this branch of the subject it is necessary to mention only the work of the Schools at Calcutta and Bombay in the present article. The Calcutta school, except for occasional experiments in the application of the graphic arts to lithography, engraving and stained glass, has become a school of painting and drawing. That at Bombay covers a wider field; for in addition to classes for modelling, painting and design it possesses a special school of architecture; a range of technical workshops, in which instruction is given in the applied arts; and research laboratories and studios devoted solely to the improvement of the Pottery industry. It is in the principles underlying the instruction in painting that the schools at Calcutta and Bombay have taken almost diametrically opposite roads to reach the end they both have in view, namely, the revival of the art of painting in India by means of an indigenous school of Indian painters. Mr. Havell, who several years ago was the Principal of the Calcutta School, banished from within its walls every vestige of European art; and claimed that the traditional art of India, in its old forms, is not dead, but merely sleeping or smothered by the blanket of European culture laid upon it for the last 150 years, and needed but to be released from this incubus to regain its pristine vigour. Well equipped with literary ability; backed by intense enthusiasm for the views he held, which he advocated with admirable persistence; he imposed upon his students an exclusive and severe study of the Moghul and Rajput schools of painting. He was fortunate in finding a willing and equally enthusiastic disciple in Mr. Abinandranath Tagore, an artist of fine imagination and fancy, endowed with technical ability of a high order, combined with a serious devotion to his art. He with other Bengal painters, inspired by Mr. Havell's precepts, founded, about twenty years ago, what has since become known as the Calcutta School of painting. In their early work the painters of this school closely adhered to the conventions of Moghul and Rajput artists, whom they took as their models; and these early examples made a great impression upon all European critics who saw them. They were welcomed as the first sign of a genuine revival of Indian painting, based upon traditional lines, and it was confidently hoped that the movement would meet with the support it merited from Indians of all classes. Interesting as many individual works of the school undoubtedly are the anticipations which greeted its inception have scarcely been fulfilled by the Calcutta school. The painters themselves have never reached the high technical standard of the artists who produced the best works of the Moghul or Rajput schools, and, as time has passed, their outlook appears to have shifted, and, while stemming the flood of western influence, they appear to have drifted into a backwater of Japanese conventions. The Indian public has failed to give the school the support it was hoped they would afford and the movement has had to depend for encourage-

ment mainly upon Europeans in England and India.

Bombay School of Art.—The attitude towards the development of art in modern India taken by Mr. Cecil Burns, who long guided the policy of the Bombay school, was diametrically opposite to that favoured by Mr. Havell. While yielding to no one in his admiration for the ancient art of India, and giving every encouragement to his students to study its masterpieces, the view he takes is that with European literature dominating the system under which the educated classes in India are trained; with European ideas, and science permeating the professional, commercial, industrial, and political life of the country, it is not possible for modern Indians now to recapture the spirit which alone gave vitality to the great works of the past; that without this spirit, the conventions the ancient artists adopted are mere dead husks; and that to copy these would be as unprofitable as it would be for the artists of Europe to harness themselves to the conventions of the Greek and Roman sculptors or to those of the mediæval painters; that with European pictures, often of inferior quality illustrating every educational text book, and sold in the shops of every large city, it is essential for the proper education of art students that they should have before them the masterpieces of European art; and that, with the wide adoption of European styles of architecture in India, it is necessary for a school of art to possess the best examples of ornament applicable to the great historic styles, for the purpose of study and reference. There are certain basic principles common to the technique of all great art, such as fine and accurate drawing in its widest sense, composition and design, and the science of colour harmony. By means of these an artist can express his individuality and emotions, and Mr. Burns held that the main function of a School of Art is to equip its students with the power of expression, untrammelled by any set conventions, so that when they leave the school, they do so with the capacity to employ their faculties in any direction their sympathies and tastes may impel them to take. Which of these two very divergent theories will produce the result both these gentlemen unite in wishing to see brought to pass, time alone will show. Certain it is that the driving force of any artistic impulse must come from within the nation, and that India, like every other country, in its art, as in other matters, must work out its own salvation.

Among the developments during Mr. Burns' administration were the founding of the Architectural School, the extension of drawing classes in the Government Schools, and the appointment of an Inspector of Drawing to inspect and report on the drawing classes in the Schools. A Pottery Department was also started and was abolished in 1926. Mr. Burns retired in 1918 and was succeeded in 1919 by the present Principal, Mr. W. E. Gladstone Solomon, A.R.B.C. The latter has studiously avoided any dogmatic theories as to the ultimate end which Indian art is destined to attain, though he has consistently pointed out the Indian's pre-eminence in the decoration of wall spaces.

The guiding principle with Mr. Solomon has been to teach the students to draw and to paint what they see; and further to encourage by all possible means their natural progress in the decorative direction towards which their inherent instinct most obviously urges them He has always maintained that theory in regard to the training of Indian Art students it is itself unproductive and can only be proven by practice; and as Mr. Solomon has now held the post of Principal for several years it is possible to gauge the results achieved by his system of training.

The Life Classes which were started at the end of 1919 have recently been pronounced by competent judges as well up to the level of the Life Classes of the European Schools of Art. But proficiency in technique forms only one side of the present system of training; for even in Europe, too much of the study from Life is quite capable of negativing its own object. In India, where the decorative instinct is inherent, and where the possibilities of freehand drawing are still understood, the danger of overdoing the Life Class is even more palpable. So side by side with these realistic aids to study, and at the same period, a Class of Indian Decorative Painting was inaugurated in the Bombay School of Art under the direction of the Governor of Bombay (Lord Lloyd). As this class specialises in **Mural Painting** it has long been popularly known as the Class of Mural Painting. This class has executed the decorations for many public and private buildings, and painted the ceiling and panels of a specially constructed Indian Room which was exhibited at Wembley in 1924. A great deal of controversy, which has been characterised by its academic rather than its practical note, has centred round these new movements in art training in India; but the Bombay School of Art has retained the patronage and support of the public and the increase in the number of its students (who now number over 600 in all sections of the School) has been continuous since it took its present line. It is significant that the widespread revival of public interest in Art in Western India has synchronised with these activities.

The School of Art has of late years enjoyed the patronage of successive Governors of Bombay and, largely due to the efforts of Sir Leslie Wilson, the Government of India inaugurated a competition of Indian Artists in 1927 for the decoration of wall spaces in the new buildings at New Delhi. It is a very promising result that five artists from Bombay and and the Bombay and Lahore Schools of Art proved successful in this first essay, and have been chosen for the work of painting certain wall spaces in the Secretariat.

Indian Architecture.

I. ANCIENT.

The architecture of India has proceeded on lines of its own, and its monuments are unique among those of the nations of the world. An ancient civilization, a natural bent on the part of the people towards religious fervour of the contemplative rather than of the fanatical sort, combined with the richness of the country in the sterner building materials—these are a few of the factors that contributed to making it what it was, while a stirring history gave it both variety and glamour. Indian architecture is a subject which at the best has been studied only imperfectly, and a really comprehensive treatise on it has yet to be written. The subject is a vast and varied one, and it may be such a treatise never will be written in the form of one work at any rate. The spirit of Indian art is so foreign to the European of art culture that it is only one European in a hundred who can entirely understand it, while art criticism and analysis is a branch of study that the modern Indian has not as yet ventured upon to any appreciable extent. Hitherto the one, and with a few exceptions the only recognized authority on the subject has been Fergusson, whose compendious work is that which will find most ready acceptance by the general reader. But Fergusson attempted the nearly impossible task of covering the ground in one volume of moderate dimensions, and it is sometimes held that he was a man of too purely European a culture, albeit wide and eclectic, to admit of sufficient depth of insight in this particular direction. Fergusson's classification by races and religions is, however, the one that has been generally accepted hitherto. He asserts that there is no stone architecture in India of an earlier date than two and a half centuries before the Christian era, and that "India owes the introduction of the use of stone for architectural purposes, as she does that of Buddhism as a state religion, to the great Asoka, who reigned B.C. 272 to 236."

Buddhist Work.

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The architecture of the Jains comes next in order. Of this rich and beautiful style the most noted examples are perhaps the Dilwara temples near Mount Abu, and the unique "Tower of Victory" at Chittore.

Other Hindu Styles.

The Dravidian style is the generic title usually applied to the characteristic work of the Madras Presidency and the South of India. It is seen in many rock-cut temples as at Ellora, where the remarkable "Kylas" is an instance of a temple cut out of the solid rock, complete, not only with respect to its interior (as in the case of mere caves) but also as to its exterior. It is, as it were, a life-size model of a complete building or group of buildings, several hundred feet in length, not built, but sculptured in solid stone, an undertaking of vast and, to our modern ideas, unprofitable industry. The Pagoda of Tanjore, the temples at Srirangam, Chidambaram, Vellore, Vijayanagar, &c., and the palaces at Madura and Tanjore are among the best known examples of the style.

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Indo-Saracenic.

Among all the periods and styles in India the characteristics of none are more easily recognizable than those of what is generally called the "Indo-Saracenic" which developed after the Mahomedan conquest. Under the new influences now brought to bear on it the architecture of India took on a fresh lease of activity and underwent remarkable modifications. The dome, not entirely an unknown feature hitherto, became a special object of development, while the arch, at no time a favourite constructional form of the Hindu builders, was now forced on their attention by the predilections of the ruling class. The minaret also became a distinctive feature. The requirements of the new religion,—the mosque with its wide spaces to meet the needs of organized congregational acts of worship—gave opportunities for broad and spacious treatments that had hitherto been to some extent denied. The Moslem hatred of idolatry set a tabu on the use of sculptured representations of animate objects in the adornment of the buildings, and led to the development

of other decorative forms. Great ingenuity came to be displayed in the use of pattern and of geometrical and foliated ornament. This Moslem trait further turned the attention of the builders to a greater extent than before to proportion, scale and mass as means of giving beauty, mere richness of sculptured surface and the aesthetic and symbolic interest of detail being no longer to be depended on to the same degree.

The art was thus the gainer by the new conditions. It gained in power and variety much as "Classic" architecture gained under the Romans. But it equally lost something too. The Indo-Saracenic is apt to appear cold and hard. The writer was impressed by this on his first view of the Gwalior palace already mentioned. Though a Hindu building that palace has yet much of what might be called the more sophisticated quality of the Indo-Saracenic work as well as some similarity of detail. It has, being Hindu, a certain amount of sculptured ornament of animated forms, and the general effect of roundness, richness and interest thereby imparted seemed eloquent in suggestion as to what is lacking in so many of the Mahometan buildings.

Foreign Influence.

There would appear to be a conflict between archæologists as to the extent of the effect on Indian art produced by foreign influence under the Mahometans. The extreme view on the one hand is to regard all the best of the art as having been due to foreign importation. The Gandharan sculptures with their Greek tendency, the development of new forms and modes of treatment to which allusion has been made, the similarities to be found between the Mahometan buildings of India and those of North Africa and Europe, the introduction of the minaret and, above all, the historical evidences that exist of the presence in India of Europeans during Mogul times, are cited in support of the theory. On the other hand those of the opposite school hold the foregoing view to be due to the prevailing European preconception that all light and leading must come by way of Europe, and the best things in art by way of Greece. To them the Gandharan sculpture, instead of being the best, is the worst in India even because of its Greek tincture. They find in the truly indigenous work beauties and significances not to be seen in the Graeco-Bactrian sculptures, and point to those of Borobuder in Java, the work of Buddhist colonists from India, wonderfully preserved by reason of an immunity from destructive influences given by the insular position, as showing the best examples of the art extant. It is probable that a just estimate of the merits af the controversy, with respect to sculpture ot any rate, cannot be formed till time has obliterated some of the differences of taste that exist between East and West.

To the adherents of the newer school the undisputed similarities between Indo-Mahometan and Hindu buildings outweigh those between Indian and Western Mahometan work, especially in the light of the dis-similarities between the latter. They admit the changes produced by the advent of Islam but contend that the art, though modified, yet remained in its essence what it had always been, indigenous Indian. The minaret, the dome, the arch, they contended, though developed under the Moslem influence, were yet, so far as their detailed treatment and craftsmanship are concerned, rendered in a manner distinctively Indian. Fergusson is usually regarded as the leader of the former school while the latter and comparatively recent school has at present found an eager champion in Mr. E. B. Havell, whose works, on the subject are recommended for study side by side with those of the former writer. Mr. Havell practically discards Fergusson's racial method of classification into styles in favour of a chronological review of what he regards to a greater extent than did his famous precursor as being one continuous homogeneous Indian mode of architectural expression, though subject to variations from the influences brought to bear upon it and from the varied purposes to which it was applied.

Agra and Delhi.

Agra and Delhi may be regarded as the principal centres of the Indo-Saracenic style—the former for the renowned Taj Mahal, for Akbar's deserted capital of Fatehpur Sikri, his tomb at Secundra, the Moti Musjid and palace buildings at the Agra fort. At Delhi we have the great Jumma Musjid, the Fort, the tombs of Humayon, Sufdar Jung, &c., and the unique Qutb Minar. Two other great centres may be mentioned, because in each there appeared certain strongly marked individualities that differentiated the varieties of the style there found from the variety seen at Delhi and Agra, as well as that of one from that of the other. These are Ahmedabad in Gujarat and Bijapur on the Dekhan, both in the Bombay Presidency.

Ahmedabad.

At Ahmedabad with its neighbours Sirkhej and Champanir there seems to be less of a departure from the older Hindu forms, a tendency to adhere to the lintel and bracket rather than to have recourse to the arch, while the dome though constantly employed, was there never developed to its full extent as elsewhere, or carried to its logical structural conclusion. The Ahmedabad work is probably most famous for the extraordinary beauty of its stone "jali"—or pierced lattice-work, as in the palm tree windows of the Sidi Sayyid Musjid.

Bijapur.

The characteristics of the Bijapur variety of the style are equally striking. They are perhaps more distinctively Mahomedan than those of the Ahmedabad buildings in that here the dome is developed to a remarkable degree, indeed the tomb of Mahmud—the well-known "Gol Gumbaz"—is cited as shewing the greatest space of floor in any building in the world roofed by a single dome, not even excepting the Pantheon. The lintel also was here practically discarded in favour of the arch. The Bijapur style shews a bold masculine quality and a largeness of structural conception that is unequalled elsewhere in India though in richness and delicacy it does not attempt to rival the work of the further North. In this we recognize among other influences

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Among all the periods and styles in India the characteristics of none are more easily recognizable than those of what is generally called the "Indo-Saracenic" which developed after the Mahomedan conquest. Under the new influences now brought to bear on it the architecture of India took on a fresh lease of activity and underwent remarkable modifications. The dome, not entirely an unknown feature hitherto, became a special object of development, while the arch, at no time a favourite constructional form of the Hindu builders, was now forced on their attention by the predilections of the ruling class. The minaret also became a distinctive feature. The requirements of the new religion,—the mosque with its wide spaces to meet the needs of organized congregational acts of worship—gave opportunities for broad and spacious treatments that had hitherto been to some extent denied. The Moslem hatred of idolatry set a tabu on the use of sculptured representations of animate objects in the adornment of the buildings, and led to the development

of other decorative forms. Great ingenuity came to be displayed in the use of pattern and of geometrical and foliated ornament. This Moslem trait further turned the attention of the builders to a greater extent than before to proportion, scale and mass as means of giving beauty, mere richness of sculptured surface and the aesthetic and symbolic interest of detail being no longer to be depended on to the same degree.

The art was thus the gainer by the new conditions. It gained in power and variety much as "Classic" architecture gained under the Romans. But it equally lost something too. The Indo-Saracenic is apt to appear cold and hard. The writer was impressed by this on his first view of the Gwalior palace already mentioned. Though a Hindu building that palace has yet much of what might be called the more sophisticated quality of the Indo-Saracenic work as well as some similarity of detail. It has, being Hindu, a certain amount of sculptured ornament of animated forms, and the general effect of roundness, richness and interest thereby imparted seemed eloquent in suggestion as to what is lacking in so many of the Mahometan buildings.

Foreign Influence.

There would appear to be a conflict between archæologists as to the extent of the effect on Indian art produced by foreign influence under the Mahometans. The extreme view on the one hand is to regard all the best of the art as having been due to foreign importation. The Gandharan sculptures with their Greek tendency, the development of new forms and modes of treatment to which allusion has been made, the similarities to be found between the Mahometan buildings of India and those of North Africa and Europe, the introduction of the minaret and, above all, the historical evidences that exist of the presence in India of Europeans during Mogul times, are cited in support of the theory. On the other hand those of the opposite school hold the foregoing view to be due to the prevailing European preconception that all light and leading must come by way of Europe, and the best things in art by way of Greece. To them the Gandharan sculpture, instead of being the best, is the worst in India even because of its Greek tincture. They find in the truly indigenous work beauties and significances not to be seen in the Graeco-Bactrian sculptures, and point to those of Borobuder in Java, the work of Buddhist colonists from India, wonderfully preserved by reason of an immunity from destructive influences given by the insular position, as showing the best examples of the art extant. It is probable that a just estimate of the merits af the controversy, with respect to sculpture ot any rate, cannot be formed till time has obliterated some of the differences of taste that exist between East and West.

To the adherents of the newer school the undisputed similarities between Indo-Mahometan and Hindu buildings outweigh those between Indian and Western Mahometan work, especially in the light of the dis-similarities between the latter. They admit the changes produced by the advent of Islam. but contend that the art, though modified, yet remained in its essence what it had always been, indigenous Indian. The minaret, the dome, the arch, they contended, though developed under the Moslem influence, were yet, so far as their detailed treatment and craftsmanship are concerned, rendered in a manner distinctively Indian. Fergusson is usually regarded as the leader of the former school while the latter and comparatively recent school has at present found an eager champion in Mr. E. B. Havell, whose works, on the subject are recommended for study side by side with those of the former writer. Mr. Havell practically discards Fergusson's racial method of classification into styles in favour of a chronological review of what he regards to a greater extent than did his famous precursor as being one continuous homogeneous Indian mode of architectural expression, though subject to variations from the influences brought to bear upon it and from the varied purposes to which it was applied.

Agra and Delhi.

Agra and Delhi may be regarded as the principal centres of the Indo-Saracenic style—the former for the renowned Taj Mahal, for Akbar's deserted capital of Fatehpur Sikri, his tomb at Secundra, the Moti Musjid and palace buildings at the Agra fort. At Delhi we have the great Jumma Musjid, the Fort, the tombs of Humayon, Sufdar Jung, &c., and the unique Qutb Minar. Two other great centres may be mentioned, because in each there appeared certain strongly marked individualities that differentiated the varieties of the style there found from the variety seen at Delhi and Agra, as well as that of one from that of the other. These are Ahmedabad in Gujarat and Bijapur on the Dekhan, both in the Bombay Presidency.

Ahmedabad.

At Ahmedabad with its neighbours Sirkhej and Champanir there seems to be less of a departure from the older Hindu forms, a tendency to adhere to the lintel and bracket rather than to have recourse to the arch, while the dome though constantly employed, was there never developed to its full extent as elsewhere, or carried to its logical structural conclusion. The Ahmedabad work is probably most famous for the extraordinary beauty of its stone "jali"—or pierced lattice-work, as in the palm tree windows of the Sidi Sayyid Musjid.

Bijapur.

The characteristics of the Bijapur variety of the style are equally striking. They are perhaps more distinctively Mahomedan than those of the Ahmedabad buildings in that here the dome is developed to a remarkable degree, indeed the tomb of Mahmud—the well-known "Gol Gumbaz"—is cited as shewing the greatest space of floor in any building in the world roofed by a single dome, not even excepting the Pantheon. The lintel also was here practically discarded in favour of the arch. The Bijapur style shews a bold masculine quality and a largeness of structural conception that is unequalled elsewhere in India though in richness and delicacy it does not attempt to rival the work of the further North. In this we recognize among other influences

that of the prevailing material, the hard uncompromising Dekhan basalt. In a similar manner the characteristics of the Ahmedabad work with its greater richness of ornamentation are bound up with the nature of the Gujarat freestone, while at Delhi and Agra the freer choice of materials available—the local red and white sandstones, combined with access to marble and other more costly materials—was no doubt largely responsible for the many easily recognizable characteristics of the architecture of these centres.

II. MODERN.

The modern architectural work of India divides itself sharply into two classes. There is first that of the indigenous Indian "Master-builder" to be found chiefly in the Native States, particularly those in Rajputana. Second there is that of British India, or of all those parts of the peninsula wherever Western ideas and methods have most strongly spread their influence, chiefly, in the case of architecture, through the medium of the Department of Public Works. The work of that department has been much animadverted upon as being all that building should not be, but, considering it has been produced by men of whom it was admittedly not the *metier*, and who were necessarily contending with lack of expert training on the one hand and with departmental methods on the other, it must be conceded that it can shew many notable buildings. Of recent years there has been a tendency on the part of professional architects to turn their attention to India, and a number of these has even been drafted into the service of Government as the result of a policy initiated in Lord Curzon's Viceroyalty. In time, therefore, and with the growth of the influence of these men, such of the reproach against the building of the British in India as was just and was not merely thoughtlessly maintained as a corollary to the popular jape against everything official, may gradually be removed. If this is so as to Government work progress should be even more assured in the freer atmosphere outside of official life. Already in certain of the greater cities, where the trained modern architect has established himself, in private practice, there are signs that his influence is beginning to be felt. He still complains, however, that the general public of India needs much educating up to a recognition of his value, both in a pecuniary sense and otherwise. It is also to be observed that the survival of a relic of the popular idea of the time before his advent, to the effect that though an architect might occasionally "design" a building it was always an engineer who built it, is still indicated by the architect in some cases deeming it advisable to style himself "architect and engineer."

To the work of the indigenous "master-builder" public attention has of recent years been drawn with some insistence, and the suggestion has been pressed that efforts should be directed towards devising means for the preservation of what is pointed out—and now universally acknowledged—to be a remarkable survival—almost the only one left in the world—of "living art," but which is threatened with gradual extinction by reason of the spread of Western ideals and fashions. The matter assumed some years ago the form of a mild controversy centring round the question of the then much discussed project of the Government of India's new capital at Delhi. It was urged that this project should be utilised to give the required impetus to Indian art rather than that it should be made a means of fostering European art which needed no such encouragement at India's expense. The advocates of this view appear for the most part to have been adherents of the "indigenous Indian" school of archæologists already mentioned, and to have based their ideas on their own reading of the past. They still muster a considerable following not only amongst the artistic public of England and India, but even within the Government services. Their opponents, holding what appears to be the more official view both as to archæology and art, have pointed to the "death" of all the arts of the past in other countries as an indication of a natural law, and deprecate as waste of energy all efforts to resist this law, or to institute what they have termed "another futile revival." The British in India, they contend, should do as did the ancient Romans in every country on which they planted their conquering foot. As those were wont to replace indigenous art with that of Rome, so should we set our seal of conquest permanently on India by the erection of examples of the best of British art. This is the view which, as we have indicated, appears to have obtained for the moment the more influential hearing, and the task of designing and directing the construction of the principal buildings in the new Capital has accordingly been entrusted jointly to a London and to a South African architect, neither of whom can be unduly influenced by either past or recent architectural practice so far as India is concerned.

But this controversy, however vital to the interests of the country's architecture, is too purely technical and academic for its merits to be estimated by the general reader or discussed here. Its chief claim on our attention lies in the fact that it affords an added interest to the tourist, who may see the fruits of both schools of thought in the various modern buildings of British India as well as examples of the "master builders" work in nearly every native town and bazaar. The town of Lashkar in Gwalior State may be cited as peculiarly rich in instances of picturesque modern Indian street architecture, while at Jaipur, Udaipur, Benares, etc., this class of work may be studied in many different forms both civil and religious. The extent to which the "unbroken tradition from the past" exists may there be gauged by the traveller who is architect enough for the purpose.

Industrial Arts.

The ancient industrial arts of India formed two distinct groups. The first included those allied to, and dependent upon, architecture; the second comprise those applied to articles devoted to religious ritual; military weapons and troppings, domestic accessories; and to personal adornment.

The articles of the first group were intended for some fixed and definite position, and the style of their design and the character of their workmanship were dictated by that of the building with which they were incorporated. Those of the second group were movable, and the range of their design was less constricted and their workmanship was more varied. Examples of work in both groups are so numerous, and the arts comprise such a diversity of application, that only a cursory survey can be attempted within the limits of a short review. Although the design and treatment differ in the two groups, the materials used were often the same. These materials cover a very wide range but space only permits of reference to work applied to the four materials upon which the Indian craftsman's skill has been most extensively displayed. These are stone, wood, metal and textiles.

Before dealing separately with each of these materials a few words upon the principal Indian styles are necessary. The two distinctive styles are Hindu and Mahomedan. The former may be termed indigenous, dating as it does from remote antiquity; the latter was a variation of the great Arabian style, which was brought into India in the fourteenth century, and has since developed features essentially Indian in character. The art of both Hindus and Mahomedans is based upon religion and the requirements of religious ritual. The obvious expression of this is shown in the different motifs used for their ornament. In Hindu art all natural forms are accepted and employed for decorative purposes; but in that of the Mahomedans, nearly all natural forms are rejected and forbidden. The basis of Mahomedan decoration is therefore mainly geometrical. In each of them, racial characteristics are strikingly exhibited. The keynote of Hindu work is exuberance, imagination and poetry; that of Mahomedan, reticence, intellect and good taste. The Hindus are lavish, and often undiscriminating, in their employment of ornament; the Mahomedans use more restraint. In fact the two styles may be compared, without straining the analogy, to the Gothic and classic styles in Europe. In both styles the fecundity of ideas and invention in design are marvellous, and the craftsmanship often reaches a very high standard. Hindu art had been subjected throughout the ages to many foreign influences, but the artistic instincts of the people have proved so conservative that, whether these alien ideas came from the east or the west, they have been absorbed, and are now stamped with a definite Indian character. Recognition of this fact alone should relieve the anxiety of those critics who fear that the penetration of Western art and culture into India at the present time will eventually rob Indian art of its national character.

Stone Work.—Carved stone work is the principal form of decoration employed in Hindu temples. In variety and scope it ranges from the massive figures in the Buddhist and Brahminical Cave Temples, and the detached sculpture of the temples of Southern India, to the delicately incised reliefs and elaborately fretted ornament of the Jain temples at Mount Abu. A curious fact in relation to Hindu work is that priority of date appears to have no relation to artistic development. It is not possible to trace, as in the case of Greek, Roman and Mediæval craftwork, the regular progressive steps from art in its primitive state to its culminating point and its subsequent decay. Styles in India seem to spring into existence fully developed; the earlier examples often exhibiting finer craftsmanship than those of a later date. There can be little doubt that stone carving in India was simply the application of the wood carvers' art to another material. The treatment of stone by the Hindu craftsmen, even in the constructive principles of their buildings, bears a closer resemblance to the practice of the wood-worker than to that of the stone mason. The earlier wooden examples from which the stone buildings and their decorations were derived have long since disappeared, but their influence is apparent. The keynote of Hindu design is rhythmic rather than symmetrical; that of their craftsmanship, vigour rather than refinement. In the carving of the human figure and of animals great power of expressing action is shown, and this spontaneous feeling is preserved despite the greatest elaboration and detail. The industry displayed is amazing, no amount of labour appears to have daunted the Hindu craftsmen in carrying out their huge and intricate schemes of decoration.

The stone carving on Mahomedan buildings except where Hindu carvers have been allowed a free hand, is much more restrained than that on Hindu temples. The fact that geometrical forms were almost exclusively used, dictated lower relief and greater refinement in the carving; while the innate good taste of the designers prompted them to concentrate the ornament upon certain prominent features, where its effect was heightened by the simplicity of the rest of the building. The invention displayed in working out geometrical patterns for work screens, inlay, and other ornamental details appears to be inexhaustible; while wonderful decorative use has been made of Arabic and Persian lettering in panels and their framing. To obtain a rich effect the Hindus relied upon the play of light and shade upon broken surfaces, the Mahomedans to attain the same end used precious materials; veneering the surfaces of their buildings with polished marble which they decorated with patterns of mosaic composed of jade, agate, onyx and other costly stones. Although the art of inlaying and working in hard stones was of Italian origin, it proved to be on eminently suited to the genius of the Indian craftsman; and many wonderful examples of their skill in the form of book rests, tables, thrones, footstools, vases and sword handles are extant to show the height of proficiency they attained. The treatment of precious

stones by Indian jewellers may here be referred to. Sir George Birdwood states that "the Indian jeweller thinks of producing the sumptuous, imposing effect of dazzling variety of rich and brilliant colours and nothing of the purity of his gems." This is true in a general sense and "full many a gem of purest ray serene" was utterly ruined by crude cutting and piercing. But although as early as the sixteenth and seventeenth centuries diamonds and precious stones from the Indian mines were taken to Europe to be cut, many of the finest jewels found their way back to the treasure houses of Indian princes.

Wood Work.—With a fine range of timbers suitable for the purpose, wood has played a great part in the construction and decoration of Indian buildings. Unfortunately, most of the ancient wood work has been destroyed by the action of the climate and the teeming insectivorous life of India; and that which escaped these enemies was wiped out by fire and the sword. It is therefore only possible to conjecture the height of artistic development these buildings and their decorations displayed by the copies in stone which have been preserved. Few if any examples of a date earlier than the sixteenth century are to be found. Many of these, and specimens of a later date to be seen in towns and cities throughout the country, are masterpieces of design and craftsmanship. The carved timber fronts and inner courtyards of houses in Ahmedabad, Nasik, and other parts of Western India are notable for their picturesqueness and beauty: the structural beams, the overhanging balconies, with their screens and supporting brackets, being carved in a manner which unites richness of effect with good taste and propriety. Of furniture, as the term is now understood, few examples were in use in India before Europeans introduced their own fashions. These were confined to small tables and stools, book rests, clothes chests and screens, the designs of which conformed somewhat closely to the architectural style of the period. Many of these were decorated with inlays of coloured woods, ivory and metal; while in some cases the wooden basis was entirely plated with copper, brass or silver. In Southern India, where close grained sandalwood is grown, jewel cases and boxes are enriched with carving executed with the attention to detail and the finish generally associated with the carving of ivory. Coloured lac was freely used to decorate many articles of furniture, especially those turned on the lathe; and rich colour effects were obtained in this, perhaps the most distinctive and typically Indian development of decoration as applied to woodwork.

Metal Work.—With the exception of weaving, the metal working industry employed and still employs the greatest number of artistic craftsmen in India. Copper and brass have always been the two metals most widely used for domestic purposes by Mahomedans and Hindus. The shapes of many of these humble vessels are among the most beautiful to be found in the country. They exhibit that sense of variety and touch of personality which are only given by the work of the human hand; and the shapes are those which grow naturally from the working of the material with the simplest implements. In the technical treatment of brass and copper Indian craftsmen have shown a taste and skill unsurpassed by those of other nations, except in the department of fine casting. In this, and in the working of gold and silver, a higher standard of technical and constructive exactness has been reached by the metal workers of Europe and Japan. It may be taken as an axiom that the more beautiful the shape of an article is, and this especially applies to metal work, the less need exists for the decoration of its surface. It is equally true that the highest test of craftsmanship is the production of a perfect article without any decoration. The reason being that the slightest technical fault is apparent on a plain surface, but can be hidden or disguised of one which is covered with ornament. The goldsmiths and silversmiths of India were extremely skilful and industrious, but judged by this test their works often exhibit a lack of care and exactness in the structural portion and a completely satisfactory example of perfectly plain work from the hands of the gold and silversmiths of India is rarely to be met with. Much of the excessive and often inappropriate ornamentation of the articles that they produced owed its application as much to the necessity of hiding defective construction as it did to any purely decorative purpose. For many generations, ornaments of gold and silver were regarded in the light of portable wealth, a practice which naturally made for massiveness. These solid ornaments are most effective and picturesque; and, despite an enormous output of elaborate and delicate work from their hands, the most valuable contribution of the Indian metal workers to the sum total of man's artistic use of the precious metals will probably be found to lie in a certain barbaric note which distinguishes these pieces—a note not present in the craft work of other countries. In the design of Hindu gold and silver ornaments, religious symbols have been extensively used. The ornaments which bedeck the early sculptured figures, and those depicted in the paintings at the Cave Temples of Ajanta are precisely the same in design and use as similar articles made at the present time, thus affording a striking evidence of the inherent conservatism of the Hindu people and its effect upon an industrial art that makes a closer personal appeal than any other.

Textiles.—The textile industry is the widest in extent in India and is that in which her craftsmen have shown their highest achievements. Other countries, east and west of India have produced work equal, if not superior, in stone, wood, and metal; but none has ever matched that of her weavers in cotton and wool, or excelled them in the weaving of silken fabrics. Some of the products of the looms of Bengal are marvels of technical skill and perfect taste, while the plum bloom quality of the old Cashmere shawls is an artistic achievement which places them in a class by themselves. Weaving being essentially a process of repetition, was the first to which machinery was applied, and modern science has brought power loom weaving to such a state of perfection that filaments of a substance finer even than those of Dacca, which astonished our ancestors, are now produced in the mills of Lancashire. But for beauty of surface and variety of texture no machine-made fabrics have ever equalled

the finest handwork of the ancient weavers of India. Many of the most beautiful varieties of Indian textile work have disappeared, killed by the competition of the power loom; and it is to be feared that under modern conditions they are never likely to be revived. In other branches of art as applied to textiles India does not hold so pre-eminent a position as in that of weaving. The printed silks and calicoes of the seventeenth and eighteenth centuries deservedly held a high place in the estimation of Western nations, whose craftsmen learnt many valuable lessons from the technical skill, and artistic taste they display. In embroidery and fine needlework the West and the Far East have more than held their own, while nothing approaching the tapestries made in Europe in the middle ages has been produced in India. The nearest approach to these is in carpets and rugs. This art was introduced from Persia; but Indian craftsmen have never succeeded in equalling the finest work of their instructors either in colour or design.

Modern Conditions.—In the foregoing sketch of the ancient industrial art of India, as applied to the four principal materials employed, only a general indication of its more striking characteristics has been possible. A volume would be required to give a detailed description of any one of them, and would leave many other minor arts to be considered. All these branches of art came into existence, were developed and flourished in India when social and economic conditions were vastly different from those of the present day. Like similar artistic crafts carried on in Europe up to the end of the eighteenth century, they were executed by hand labour. The processes involved had not been discovered by scientific inquiry, such as is now understood by the phrase, but were the outcome of generations of slowly built up experience. We now come to the effect upon them of the changed conditions which have revolutionised industrial art in Europe during the last century.

The invention of the steam engine, and the application of mechanical power and scientific research to industry in Europe, mark the dividing line between ancient and modern industrial art. Not only on its technical side is this so, but the effect of these changes has been to alter the character of the work itself and the spirit which animated the craftsmen. In place of the ancient ideal of variety in design and treatment, which meant a limited output, the modern one of uniformity and unlimited output has been substituted. The capitalist has displaced the master craftsman; the organised factory, the small workshop; specialisation and division of labour have taken the place of general proficiency among the artisans: the function of the designer has been separated from that of the craftsman; local markets have been extended to serve the whole world, and the skilled handicraftsman has, in a great measure, become a machine-minder. It took about one hundred years of gradual change for the craftsmen of Europe fully to adjust themselves to these altered conditions; and during the greater portion of that period India protected by the difficulties of transport, continued its immemorial practice. Fifty years ago this protective barrier was removed by the opening of the Suez Canal, and the handicrafts, men of India have since been struggling to avoid the same fate which overtook those of Europe half a century before. With less time to adapt themselves to the changed conditions the Indian craftsmen have had to meet the competition of European rivals already fully equipped with new and unknown weapons. Even before this period of intense competition, observers interested in Indian craftwork had noticed evidences of its deterioration. The falling off, both in design and workmanship, was attributed to the conservative practice of the craftsmen; to the gradual loss of foreign markets, and to the long period of internal disorder which had deprived them of both the patronage of the rulers of an earlier age and the stimulating contact with foreign craftsmen who had previously been attracted to the splendid courts at Delhi and Agra. During the same period, an even greater degradation in design had overtaken the craftwork of Europe. This was due to entirely different causes namely, to the introduction of machinery. Attention had been so concentrated upon speedy production, mechanical accuracy and commercial organisation that beauty of design had been almost entirely neglected. This was so forcibly demonstrated at the International Exhibition of 1851 that efforts were at once made to bring art and industry together once more. Schools of Art and Museums were founded throughout England and the same system was copied in a tentative and timid fashion in India. The function of these institutions was accurately estimated in England, where the artistic industries were already highly organised and were commercially successful, and whose products were to be found in every market of the world. Their business was to assist these industries by training a body of efficient designers capable of furnishing the factories with suitable designs, new or old, and in any style, to satisfy the requirements of customers in any country. It was never supposed for an instant that a School of Art could lead an industry. In India their function was as completely misunderstood as were the causes of the depression in Indian craftwork. The schools were not only expected to lead the industries which were living, but to revive those which were moribund, and resurrect those which were dead. In the report of the Indian Industrial Commission the need for some State-aided system of industrial and commercial organisation of the industrial arts with an expanded scheme of technical and artistic instruction for the craftsmen has been recognised; and valuable suggestions were made by experts who gave their evidence when the Commission visited the different Provinces. The success of the scheme recommended by the Commission will depend entirely upon the energy with which it is applied, and the practical knowledge and the assistance required by each of the different crafts on the part of those who control it. If, in addition, the same financial assistance and encouragement are given by the Imperial and Local Governments to the Indian craftsmen that have been bestowed by their own Government upon the art workers of Japan, industrial art in India will quickly emerge from the cloud of depression, which has hung over it for a century past into the sunlight of prosperity.

Archæology.

The ancient monuments of India are as varied as they are numerous. Until a few years ago, the earliest known were the brick and stone erections of the Maurya period, a group of mounds at Lauriya Nandangarh, illustrative of the Vedic funeral customs and assignable roughly to the 7th or 8th century B.C., and some rough stone walls at the ancient city of Rajagriha of about the same period. The absence of structures of an earlier period was then supposed to be due to the fact that all previous architecture has been of wood and had completely perished. The recent excavations, however, at Mohenjo-daro, in Sind and at Harappa in the Punjab, have completely revolutionised ideas on this subject and proved that as far back as the 3rd or 4th millennia B.C. and probably much earlier still, India was in possession of a highly developed civilization with large and populous cities, well built houses, temples and public buildings of brick and many other amenities enjoyed at that period by the peoples of Mesopotamia and Egypt. Both at Mohenjo-daro and Harappa there are the remains of some 5 or 6 cities superimposed one upon the ruins of another.

The structures that have so far been exposed at Mohenjo-daro belong to the three latest cities on the site. Those of the third or earliest are the best in style; those of the first the poorest. Most of the structures are dwelling houses or shops, but there are others which appear to have been temples and one—of particularly massive proportions—is a large bath, surrounded by fenestrated galleries and halls. All were built of well burnt brick and most of them were of two or more storeys with staircases giving access to the upper rooms. In and around the ruins have been found many minor antiquities including gold and silver jewellery, engraved seals of stone and ivory and past copper implements and vessels, terracotta figurines and toys, shell ornaments and potteries both painted and plain.

These discoveries establish the existence in Sind and the Punjab during the 4th and 3rd millennia B.C. of a highly developed city life; and the presence, in many of the houses, of wells and bathrooms as well as an elaborate drainage system betoken a social condition of the citizens at least equal to that found in Sumer and superior to that prevailing in contemporary Babylonia and Egypt. The inhabitants of these cities lived largely no doubt by agriculture and it is a point of interest that the specimens of wheat found at Mohenjo-daro resemble the common variety grown in the Punjab to-day. Besides bread, their food appears to have included beef, mutton, and pork, the flesh of tortoises, turtles and gharial, fresh fish from the Indus and dried fish from the sea coast. Among their domesticated animals were the humped Indian bull, the buffalo, a short horned bull, the sheep, pig, dog, horse and elephant. Besides gold and silver they used copper, tin, bronze and lead; they were familiar with the arts of spinning and weaving and with the cultivation of cotton had attained a high degree of proficiency in the jeweller's and potters' arts.

That they possessed a well developed system of writing is evidenced by the discovery of over a thousand tablets engraved with well-executed animal devices and pictographic legends in an unknown script. The usual method of disposal of the dead appears to have been to cremate the body and then to bury a part of the burnt bones in large earthen jars or in small brick structures resembling the modern Hindu *samadhis*. Of the long period of more than 2,000 years that separates the pre-historic monuments referred to above from the historic period of India, little or nothing is yet known but there is every hope that this gap in our knowledge may be filled in by further excavations. From the time of the Mauryas, *i.e.*, 3rd century B.C., the history of architecture and the formative arts of India is clear and can be traced with relative precision.

Monumental Pillars.—The monuments, which have come down to us from the Maurya period, include, besides the caves to be referred to below, the wooden palisade (4th century B.C.) which surrounded the ancient city of Pataliputra (modern Patna), and of which a large section has been exposed, the rock and pillar edicts of Asoka (*Circa* 250 B.C.), the remains of a large pillared hall constructed by the same emperor at Pataliputra, a number of brick stupas and a monolithic rail which originally surmounted an Asoka *stupa* at Sarnath near Benares. Altogether twelve pillars of Asoka are known. Ten of them bear his inscriptions. Of these the Lauriya-Nandangarh column in the Champaran District, Tirhut, is practically uninjured. The capital of each column, like the shaft, was monolithic, and comprised three members, *viz.*, a Persepolitan bell, abacus, and crowning sculpture in the round. By far the best capital of Asoka's time was that exhumed at Sarnath near Benares. The four lions standing back to back on the abacus are carved with extraordinary precision and accuracy, and originally supported a wheel symbolizing the law of piety preached by the Buddha. Several pieces of this wheel were found and are now preserved in the Archæological Museum at Sarnath. Of the post-Asokan period one pillar (B.C.) 150 stands to the north-east of Besnagar in the Gwalior State, another in front of the cave of Karli (A.D. 70), and a third at Eran in Central Provinces belonging to the 5th Century A.D. All these are of stone; but there is one of iron also. It is near the Qutb Minar at Delhi, and an inscription on it speaks of its having been erected by a king called Chandra, identified with Chandragupta II. (A.D. 375-413) of the Gupta dynasty. It is wonderful "to find the Hindus at that age forging a bar of iron larger than any that have been forged even in Europe to a very late date, and not frequently even now." Pillars of later style are found all over the country, especially in the Madras Presidency. No less than twenty exist in the South Kanara District. A particularly

elegant example faces a Jaina temple at Mudabidri, not far from Mangalore.

Topes.—*Stupas*, known as *dagabas* in Ceylon and commonly called Topes in North India, were constructed either for the safe custody of relics hidden in a chamber often near the base or to mark the scene of notable events in Buddhist or Jaina legends. Though we know that the ancient Jainas built *stupas*, no specimen of Jaina *stupas* is now extant. A notable structure of this kind which existed until recent times, was the Jaina *stupa* which stood on the Kankali Tila site at Muttra and yielded a large number of Jaina sculptures now deposited in the Provincial Museum at Lucknow. Of those belonging to the Buddhists, the great Tope of Sanchi in Bhopal is the most intact and entire of its class. It consists of a low circular drum supporting a hemispherical dome of less diameter. Round the drum is an open passage for circumambulation, and the whole is enclosed by a massive stone railing with lofty gates facing the cardinal points. The gates are essentially wooden in character, and are carved, inside and out, with elaborate sculptures. The original *stupa*, which was of brick and not more than half the present dimensions, was apparently erected by Asoka at the same time as his lion-crowned pillar near the south gate, but as Sir John Marshall's recent explorations have conclusively shown, its outer casing of stone, the railing and the gateways were at least 150 and 200 years later, respectively. Other famous Buddhist *stupas* that have been found are those of Sarnath, Bharhut between Allahabad and Jubbulpore, Amravati in the Madras Presidency, and Piprahwa on the Nepalese frontier. The tope proper at Bharhut has entirely disappeared, having been utilised for building villages, and what remained of the rail has been removed to the Calcutta Museum. The bas-reliefs on this rail which contain short inscriptions and thus enable one to identify the scenes sculptured with the *Jatakas* or Birth Stories of the Buddha give it a unique value. The *stupa* at Amravati also no longer exists, and portions of its rail, which is unsurpassed in point of elaboration and artistic merit, are now in the British and Madras Museums. The *stupa* at Piprahwa was opened by Mr. W. C. Peppe in 1898, and a steatite or soap-stone reliquary with an inscription on it was unearthed. The inscription, according to many scholars, speaks of the relics being of the Buddha himself and enshrined by his kinsmen, the Sakyas. If this interpretation is correct, we have here one of the *stupas* that were erected over the ashes of Buddha immediately after his demise.

Caves.—Of the rock excavations which are one of the wonders of India, nine-tenths belong to Western India. The most important groups of caves are situated in Bhaja, Bedsa, Karli, Kanheri, Junnar, and Nasik in the Bombay Presidency; Ellora and Ajanta in Nizam's Dominions, Barabar and Nagarjuni 16 miles north of Gaya, and Udayagiri and Khandagiri 20 miles from Cuttack in Orissa. The caves belong to the three principal sects into which ancient India was divided, *viz.*, the Buddhists, Hindus and Jainas. The earliest caves so far discovered are those of Barabar and Nagarjuni which were excavated by Asoka and his grandson Dasaratha, and dedicated to Ajivikas, a naked sect founded by Malinkhali putta Gosala. The next earliest caves are those of Bhaja, Pitalkhora and cave No. 9 at Ajanta and No. 19 at Nasik. They have been assigned to 200 B.C. by Fergusson and Dr. Burgess. But there is good reason to suppose from Sir John Marshall's recent researches and from epigraphic considerations that they are considerably more modern. The Buddhist caves are of two types—the *chaityas* or chapel caves and *viharas* or monasteries for the residence of monks. The first are with vaulted roofs and horse-shoe shaped windows over the entrance and have interiors consisting of a nave and side aisles with a small *stupa* at the inner circular end. They are thus remarkably similar to Christian basilicas. The second class consist of a hall surrounded by a number of cells. In the later *viharas* there was a sanctum in the centre of the back wall containing a large image of Buddha. Hardly a *chaitya* is found without one or more *viharas* adjoining it. Of the Hindu cave temples that at Elephanta near Bombay is perhaps the most frequented. It is dedicated to Siva and is not earlier than the 7th century A.D. But by far the most renowned cave-temple of the Hindus is that known as Kailasa at Ellora. It is on the model of a complete structural temple but carved out of solid rock. It also is dedicated to Siva and was excavated by the Rashtrakuta king, Krishna I, (A. D. 768), who may still be seen in the paintings in the ceilings of the upper porch of the main shrine. Of the Jaina caves the earliest are at Khandgiri and Udayagiri; those of the mediæval type, in Indra Sabha at Ellora; and those of the latest period, at Ankai in Nasik. The ceilings of many of these caves were once adorned with fresco paintings. Perhaps, the best preserved among these are those at Ajanta, which were executed at various periods between 350-650 A.D. and have elicited high praise as works of art. Copies were first made by Major Gill, but most of them perished by fire at the Crystal Palace in 1866. The lost ones were again copied by John Griffiths of the Arts School, Bombay, half of whose work was similarly destroyed by a fire at South Kensington. They were last copied by Lady Herringham during 1909-11. Her pictures, which are in full scale, are at present exhibited at the Indian Section of the Victoria and Albert Museum, South Kensington, and have been reproduced in a volume brought out by the India Society.

Gandhara Monuments.—On the north-west frontier of India, anciently known as Gandhara, are found a class of remains, ruined monasteries and buried *stupas*, among which we notice for the first time representations of Buddha and the Buddhist pantheon. The free use of Corinthian capitals, friezes of nude Erotes bearing a long garland, winged Atlantes without number, and a host of individual motifs clearly establish the influence of Hellenistic art. The mound at Peshawar, locally known as Shah-ji-ke-Dheri, which was explored in 1909, brought to light several interesting sculptures of this school together with a reliquary casket, the most remarkable bronze object of the Gandhara period. The inscription on the casket left no doubt as to the mound being the *stupa* raised over the bones of Buddha by the Indo-Scy-

thian king Kanishka. They were presented by Lord Minto's Government to the Buddhists of Burma and are now enshrined at Mandalay. To about the same age belong the *stupas* at Manikyala in the Punjab opened by Ranjit Singh's French Generals, Ventura and Court, in 1830. Some of them contained coins of Kanishka.

Structural Temples.—Of this class the earliest examples are the Varaha temple at Deogarh, District Jhansi, another temple at Sanchi, the brick temples at Bhitargaon in the district of Cawnpore, all of which belong to the Gupta period and a later one at Tigowa in the Central Provinces. In South India we have two more examples, *viz.*, Lad Khan and Durga temples at Aihole in Bijapur, the latter of which cannot be later than the eighth century A.D. The only common characteristic is flat roofs without spires of any kind. In other respects they are entirely different and already here we mark the beginning of the two styles, Indo-Aryan and Dravidian, whose differences become more and more pronounced from the 7th century onwards. In the Indo-Aryan style, the most prominent ones tend to the perpendicular, and in the Dravidian to the horizontal. The salient feature of the former again is the curvilinear steeple, and of the latter, the pyramidal tower. The most notable examples of the first kind are to be found among the temples of Bhubaneswar in Orissa, Khajarah in Bundelkhand, Osia in Jodhpur, and Dilwara on Mount Abu. One of the best known groups in the Dravidian style is that of the Mamallapuram Raths, of 'Seven Pagodas,' on the seashore to the south of Madras. They are each hewn out of a block of granite, and are rather models of temples than *raths*. They are the earliest examples of typical Dravidian architecture, and belong to the 7th century. To the same age has to be assigned the temple of Kailasanath at Conjeeveram, and to the following century some of the temples at Aihole and Pattadkal of the Bijapur District, Bombay Presidency, and the monolithic temple of Kailasa at Ellora, referred to above. Of the later Dravidian style the great temple at Tanjore and the Srirangam temple of Trichinopoly are the best examples.

Intermediate between these two main styles comes the architecture of the Deccan, called Chalukyan by Fergusson. In this style the plan becomes polygonal and star-shaped instead of quadrangular; and the high-storeyed spire is converted into a low pyramid in which the horizontal treatment of the Dravidian is combined with the perpendicular of the Indo-Aryan. Some fine examples of this type exist at Dambal, Rattihali, Tilliwalli and Hangal in Dharwar, Bombay Presidency, and at Ittagi and Warangal in Nizam's Dominions. But it is in Mysore among the temples at Hallebid, Belur, and Somnathpur that the style is found in its full perfection.

Inscriptions.—We now come to inscriptions, of which numbers have been brought to light in India. They have been engraved on varieties of materials, but principally on stone and copper. The earliest of these are found incised in two distinct kinds of alphabet, known as Brahmi and Kharoshthi The Brahmi was read from left to right, and from it have been evolved all the modern vernacular scripts of India. The Kharoshthi was written from right to left, and was a modified form of an ancient Aramaic alphabet introduced into the Punjab during the period of the Persian domination in the 5th century B.C. It was prevalent up to the 4th century A.D., and was supplanted by the Brahmi. The earliest dateable inscriptions are the celebrated edicts of Asoka to which a reference has been made above. One group of these has been engraved on rocks, and another on pillars. They have been found from Shahbazgarhi 40 miles north-east of Peshawar to Nigliva in the Nepal Tarai, from Girnar in Kathiawar to Dhauli in Orissa, from Kalsi in the Lower Himalayas to Siddapur in Mysore, showing by the way the vast extent of territory held by him. The reference in his Rock Edicts to the five contemporary Greek Princes, Antiochus II. of Syria, Ptolemy Philadelphus, and so forth is exceedingly interesting, and fixes B.C. 269 as the date of his coronation. His Rumindei pillar inscription, again, discovered in Nepal Tarai, now settles, beyond all doubt, the birth-place of Buddha which was for long disputed. Another noteworthy record is the inscription of the Besnagar pillar. The pillar had been known for a long time but Sir John Marshall was the first to notice the inscription on it. It records the erection of this column, which was a Garuda pillar, in honour of the god Vasudeva by one Heliodoros, son of Dion, who is described as an envoy of King Antialkidas of Taxila. Heliodoros is herein called a *Bhagavata*, which shows that though a Greek he had become a Hindu and presumably a Vaishnava. Another inscription worth noticing and especially in this connection is that of Cave No. 10 at Nasik. The donor of this cave, Ushavadata, who calls himself a Saka and was thus an Indo-Scythian, is therein spoken of as having granted three hundred thousand kine and sixteen villages to gods and Brahmans and as having annually fed one hundred thousand Brahmans. Here is another instance of a foreigner having embraced Hinduism. Thus for the political, social, economical and religious history of India at the different periods the inscriptions are invaluable records, and are the only light but for which we are 'forlorn and blind.'

Saracenic Architecture.—This begins in India with the 13th century after the permanent occupation of the Muhammadans. Their first mosques were constructed of the materials of Hindu and Jaina temples, and sometimes with comparatively slight alterations. The mosque called *Adhai-din-ka-jhompra* at Ajmer and that near the Qutb Minar are instances of this kind. The Muhammadan architecture of India varied at different periods and under the various dynasties, imperial and local. The early Pathan architecture of Delhi was massive and at the same time was characterised by elaborate richness of ornamentation. The Qutb Minar and tombs of Altamsh and Ala-ud-din Khilji are typical examples. Of the Sharqi style we have three mosques in Jaunpur with several tombs. At Mandu in the Dhar State, a third form of Saracenic architecture sprang up, and we have here the Jami Masjid, Hoshang's tomb, Jahaz Mahal and Hindola Mahal as the most notable instances of the secular and

ecclesiastical styles of the Malwa Pathans. The Muhammadans of Bengal again developed their own style, and Pandua, Malda, and Gaur teem with the ruins of the buildings of this type, the important of which are the Adina Masjid of Sikandar Shah, the Elakhi mosque, Kadam Rasul Masjid, and so forth. The Bahmani dynasty of Gulbarga and Bidar were also great builders, and adorned their capitals with important buildings. The most striking of these is the great mosque of Gulbarga, which differs from all mosques in India in having the whole central area covered over so that what in others would be an open court is here roofed by sixty-three small domes. "Of the various forms which the Saracenic architecture assumed," says Fergusson, "that of Ahmedabad may probably be considered to be the most elegant." It is notable for its carved stone work; and the work of the perforated stone windows in Sidi Sayyid's mosque, the carved niches of the minars of many other mosques, the sculptured *Mihrabs* and domed and panelled roofs is so exquisite that it will rival anything of the sort executed elsewhere at any period. No other style is so essentially Hindu. In complete contrast with this was the form of architecture employed by the Adil Shahi dynasty of Bijapur. There is here relatively little trace of Hindu forms or details. The principal buildings now left at Bijapur are the Jami Masjid, Gagan Mahal, Mihtar Mahal, Ibrahim Rauza and mosque and the Gol Gumbaz. Like their predecessors, the Pathans of Delhi, the Moghuls were a great building race. Their style first began to evolve itself during the reign of Akbar in a combination of Hindu and Muhammadan features. Noteworthy among the emperor's buildings are the tomb of Humayun, and the palaces at Fatehpur Sikri and Agra. Of Jehangir's time his mosque at Lahore and the tomb of Itimad-ud-daula are the most typical structures. "The force and originality of the style gave way under Shah Jahan to a delicate elegance and refinement of detail." And it was during his reign that the most splendid of the Moghul tombs, the Taj Mahal at Agra, the tomb of his wife Mumtaz Mahal, was constructed. The Moti Masjid in Agra Fort is another surpassingly pure and elegant monument of his time.

Archæological Department.—As the archæological monuments of India must attract the attention of all intelligent visitors, they would naturally feel desirous to know something of the Archæological Department. The work of this Department is primarily two-fold, conservation, and research and exploration. None but spasmodic efforts appears to have been made by Government in these directions till 1870 when they established the Archæological Survey of India and entrusted it to General (afterwards Sir) Alexander Cunningham, who was also the first Director-General of Archæology. The next advance was the initiation of the local Surveys in Bombay and Madras three years after. The work of these Surveys, however, was restricted to antiquarian research and description of monuments, and the task of conserving old buildings was left to the fitful efforts of the local Governments, often without expert guidance or control. It was only in 1878 that the Government of India under Lord Lytton awoke to this deplorable condition, and sanctioned a sum of 3¾ lakhs to the repair of monuments in United Provinces, and soon after appointed a conservator. Major Cole, who did useful work for three years. Then a reaction set in, and his post and that of the Director-General were abolished. The first systematic step towards recognising official responsibility in conservation matters was taken by Lord Curzon's Government, who established the seven Archæological Circles that now obtain, placed them on a permanent footing and united them together under the control of a Director-General, provision being also made for subsidising local Governments out of imperial funds, when necessary. The Ancient Monuments Preservation Act was passed for the protection of historic monuments and relics especially in private possession and also for State control over the excavation of ancient sites and traffic in antiquities. Under the direction of Sir John Marshall, Kt., C.I.E., Director-General of Archæology, a comprehensive and systematic campaign of repair and excavation has been prosecuted, and the result of it is manifest in the present altered conditions of many old and historic buildings and in the scientific excavation of buried sites such as Taxila, Pataliputra, Sanchi in the Bhopal State, Sarnath near Benares, and in the Indus Valley at Harappa in the Punjab and Mohenjo Daro in Sind. Of all these works those of most general interest are the Mohenjo Daro excavations, for here the Archæological Department have unearthed remains of pre-historic cities dating back to 3000 B.C. and further. The Finance Department of the Government of India invited the Legislative Assembly in March 1926, to allocate half a crore of rupees from a non-recurring surplus to form an endowment fund for excavation, so that there should be a regular income of two and a half lakhs of rupees for the purpose. Strong Brahmin opposition was advanced against the proposal and it fell through, but other measures have been taken to ensure that the researches in the Indus Valley shall be pursued in the best possible manner on the revenue grants available. The Secretary of State recently sanctioned the appointment of an eminent Orientalist and explorer, Mr. E. J. Mackay, to take charge of the Mohenjo Daro excavations. He arrived in India in November, 1926.

Indian Time.

For many years Indian time was in a state of chaotic confusion. What was called Madras or Railway time was kept on all the railways: and each great centre of population kept its own local time, which was not based on any common scientific principle and was divorced from the standards of all other countries. It was with a view to remedying this confusion that the Government of India took the matter up in 1904, and addressed to the Local Governments, and through them to all local bodies, a long letter which reviewed the situation and made suggestions for the future. The essential points in this letter are indicated below:

"In India we have already a standard time, which is very generally, though by no means universally, recognised. It is the Madras local time, which is kept on all railway and telegraph lines throughout India and which is 5h. 21m. 10s. in advance of Greenwich. Similarly, Rangoon local time is used upon the railways and telegraphs of Burma, and is 6h. 24m. 47s. ahead of Greenwich. But neither of these standards bears a simple and easily remembered relation to Greenwich time.

"The Government of India have several times been addressed by Scientific Societies, both in India and in England, and urged to fall into line with the rest of the civilised world. And now the Royal Society has once more returned to the attack. The Committee of that Society which advises the Government of India upon matters connected with its observatories, writes:—'The Committee think that a change from Madras time to that corresponding to a longitude exactly 5½ hours east of Greenwich would be an improvement upon the existing arrangements; but that for international scientific purposes the hourly zone system, making the time 5 hours in advance of Greenwich in the west, and 6 hours in advance in the east of India would be preferable.'

"Now if India were connected with Europe by a continuous series of civilised nations with their continuous railway systems all of which had adopted the European hour-zone system, it would be imperative upon India to conform and to adopt the second suggestion. But as she is not, and as she is as much isolated by uncivilised States as Cape Colony is by the ocean, it is open to her to follow the example of that and some other similarly situated colonies and to adopt the first suggestion.

"It is believed that this will be the better solution. There are obvious objections to drawing an arbitrary line right across the richest and most populous portions of India, and so as to bisect all the main lines of communication, and keeping times differing by an hour on opposite sides of that line. India has become accustomed to a uniform standard in the Madras time of the railways; and the substitution for it of a double standard would appear to be a retrograde step; while it would, in all probability, be strongly opposed by the railway authorities. Moreover, it is very desirable that whatever system is adopted should be followed by all Europeans and Indians alike; and it is certain that the double standard would puzzle the latter greatly; while by emphasising the fact that railway differed from local time, it might postpone or even altogether prevent the acceptance of the former instead of the latter by people generally over a large part of India. The one great advantage which the second possesses over the first alternative is, that under the former, the difference between local and standard time can never exceed half an hour: whereas under the latter it will even exceed an hour in the extreme cases of Karachi and Quetta. But this inconvenience is believed to be smaller than that of keeping two different times on the Indian system of railways and telegraphs.

"It is proposed, therefore, to put on all the railway and telegraph clocks in India by 8m. 50s. They would then represent a time 5½ hours faster than that of Greenwich, which would be known as **Indian Standard Time**: and the difference between standard and local time at the places mentioned below would be approximately as follows, the figures representing minutes, and F. and S. meaning that the standard time is in advance of or behind local time respectively:—Dibrugarh 51 S., Shillong 38 S., Calcutta 24 S., Allahabad 2 F., Madras 9 F., Lahore 33 F., Bombay 39 F., Peshawar 44 F., Karachi 62 F., Quetta 62 F.

"This standard time would be as much as 54 and 55 minutes behind local time at Mandalay and Rangoon, respectively; and since the railway system of Burma is not connected with that of India, and already keeps a time of its own, namely, Rangoon local time, it is not suggested that Indian Standard Time should be adopted in Burma. It is proposed, however, that instead of using Rangoon Standard Time as at present, which is 6h. 24m. 47s. in advance of Greenwich, a Burma Standard Time should be adopted on all the Burmese railways and telegraphs, which would be one hour in advance of Indian Standard Time, or 6½ hours ahead of Greenwich time, and would correspond with 97° 30′ E. longitude. The change would bring Burma time into simple relation both with European and with Indian time, and would (among other things) simplify telegraphic communication with other countries.

"Standard time will thus have been fixed for railways and telegraphs for the whole of the Indian Empire. Its general adoption for all purposes, while eminently advisable, is a matter which must be left to the local community in each case."

It is difficult to recall, without a sense of bewilderment, the reception of this proposal by various local bodies. To read now the fears that were entertained if Standard Time was adopted is a study in the possibilities of human

error. The Government scheme left local bodies to decide whether or not they would adopt it. Calcutta decided to retain its own local time, and to-day Calcutta time is still twenty-four minutes in advance of Standard Time. In Bombay the first reception of the proposal was hostile; but on reconsideration the Chamber of Commerce decided in favour of it and so did the Municipality. Subsequently the opposing element in the Municipality brought in a side resolution, by which the Municipal clocks were put at Bombay time which is thirty-nine minutes behind Standard Time. On the 1st January 1906 all the railway and telegraph clocks in India were put at Indian Standard Time; in Burma the Burma Standard Time became universal. Calcutta retains its former Calcutta time; but in Bombay local time is retained only in the clocks which are maintained by the Municipality and in the establishments of some orthodox Hindus. Elsewhere Standard Time is universal.

TIDAL CONSTANTS.

The approximate standard time of High Water may be found by adding to, or subtracting from, the time of High Water at London Bridge, given in the calendar, the correction given as below:—

		H.	M.			H.	M.
Gibraltar	*sub.*	0	32	Rangoon River Entrance	*add*	1	35
Malta	*add*	1	34	Penang	*sub.*	1	39
Karachi	*sub.*	2	33	Singapore	,,	3	25
Bombay	,,	1	44	Hongkong	,,	4	27
Goa	,,	2	44	Shanghai	,,	0	34
Point de Galle	*add*	0	12	Yokohama	*add*	3	6
Madras	*sub.*	5	6	Valparaiso	*sub.*	4	40
Calcutta	,,	0	19	Buenos Ayres	*add*	4	9
Rangoon Town	*add*	2	41	Monte Video	,,	0	32

Coinage, Weights and Measures.

As the currency of India is based upon the rupee, statements with regard to money are generally expressed in rupees, nor has it been found possible in all cases to add a conversion into sterling. Down to about 1873 the gold value of the rupee (containing 165 grains of pure silver) was approximately equal to 2s., or one-tenth of a £, and for that period it is easy to convert rupees into sterling by striking off the final cipher (Rs. 1,000=£100). But after 1873, owing to the depreciation of silver as compared with gold throughout the world, there came a serious and progressive fall in the exchange, until at one time the gold value of the rupee dropped as low as 1s. In order to provide a remedy for the heavy loss caused to the Government of India in respect of its gold payments to be made in England, and also to relieve foreign trade and finance from the inconvenience due to constant and unforeseen fluctuations in exchange, it was resolved in 1893 to close the mints to the free coinage of silver, and thus force up the value of the rupee by restricting the circulation. The intention was to raise the exchange value of the rupee to 1s. 4d., and then introduce a gold standard at the rate of Rs. 15=£1. From 1899 onwards the value of the rupee was maintained, with insignificant fluctuations, at the proposed rate of 1s. 4d. until February 1920 when the recommendation of the Committee appointed in the previous year that the rupee should be linked with gold and not with sterling at 2s. instead of 1s. 4d. was adopted. This was followed by great fluctuations. (See article on Currency System).

Notation.—Another matter in connection with the expression of money statements in terms of rupees requires to be explained. The method of numerical notation in India differs from that which prevails throughout Europe. Large numbers are not punctuated in hundreds of thousands and millions, but in lakhs and crores. A **lakh** is one hundred thousand (written out as 1,00,000), and a **crore** is one hundred lakhs or ten millions (written out as 1,00,00,000). Consequently, according to the exchange value of the rupee, a lakh of rupees (Rs. 1,00,000) may be read as the equivalent of £10,000 before 1873, and as the equivalent of (about) £6,667 after 1899, while a crore of rupees (Rs. 1,00,00,000) may similarly be read as the equivalent of £1,000,000 before 1873, and as the equivalent of (about) £666,667 after 1899. With the rupee at 1s. 6d. a lakh is equivalent to £7,500 and a crore is equivalent to £750,000.

Coinage.—Finally, it should be mentioned that the rupee is divided into 16 annas, a fraction commonly used for many purposes by both Indians and Europeans. The anna was formerly reckoned as 1½d., it may now be considered as exactly corresponding to 1d. The anna is again sub-divided into 12 pies.

Weights.—The various systems of weights used in India combine uniformity of scale with immense variations in the weight of units. The scale used generally throughout Northern India, and less commonly in Madras and Bombay, may be thus expressed one maund=40 seers, one seer=16 chittaks or 80 tolas. The actual weight of a seer varies greatly from district to district, and even from village to village, but in the standard system the tola is 180 grains Troy (the exact weight of the rupee), and the seer thus weighs 2·057 lb., and the maund 82·28 lb. The standard is used in official reports.

Retail.—For calculating retail prices, the universal custom in India is to express them in terms of seers to the rupee. Thus, when prices change what varies is not the amount of money to be paid for the same quantity, but the quantity to be obtained for the same amount of money. In other words, prices in India are quantity prices, not money prices. When the figure of quantity goes up, this of course means that the price has gone down, which is at first sight perplexing to an English reader. It may, however, be mentioned that quantity prices are not altogether unknown in England, especially at small shops, where pennyworths of many groceries can be bought. Eggs, likewise, are commonly sold at a varying number for the shilling. If it be desired to convert quantity prices from Indian into English denominations without having recourse to money prices (which would often be misleading), the following scale may be adopted—based upon the assumption that a seer is exactly 2 lb., and that the value of the rupee remains constant at 1s. 4d., 1 seer per rupee=(about) 3 lb. for 2s., 2 seers per rupee=(about) 6 lb. for 2s., and so on.

The name of the unit for square measurement in India generally is the *bigha*, which varies greatly in different parts of the country. But areas have been expressed in this work either in square miles or in acres.

Proposed reforms.—Indian weights and measures have never been settled upon an organised basis suitable for commerce and trade characteristic of the modern age. They vary from town to town and village to village in a way that could only work satisfactorily so long as the dealings of towns and villages were self-contained and before roads and railways opened up trade between one and the other. It is pointed out that in England a hogshead of wine contains 63 gallons and a hogshead of beer only 54 gallons; that a bushel of corn weighs 46 lbs. in Sunderland and 240 lbs in Cornwall; that the English stone weight represents 14 lbs. in popular estimation, but only 5 lbs., if we are weighing glass, and eight for meat, but 6 lbs. for cheese. Similar instances are multiplied in India by at least as many times as India is bigger than England. If we take, for instance, the maund denomination of weight common all over India, we shall find that in a given city there are nearly as many maunds as there are articles to weigh. If we consider the maund as between district and district the state of affairs is worse. Thus in the United Provinces alone, the maund of sugar weighs 48½ seers in Cawnpore, 40 in Muttra, 72½ in Gorakhpur, 40 in Agra, 50 in Moradabad, 43½ in Saharanpur, 50 in Bareilly, 46 in Fyzabad, 48½ in Shahjehanpur, 51 in Goshangunge The maund

varies throughout all India from the Bengal or railway maund of 82-2/7 lbs. to the Factory maund of 74 lbs. 10 oz. 11 drs., the Bombay maund of 28 lbs., which apparently answers to the Forest Department maund in use at the Fuel Depot, and the Madras maund, which some authorities estimate at 25 lbs. and others at 24 lbs. and so on.

Committees of Inquiry.—These are merely typical instances which are multiplied indefinitely. There are variations of every detail of weights and measures in every part of India. The losses to trade arising from the confusion and the trouble which this state of things causes are heavy. Municipal and commercial bodies are continually returning to the problem with a view to devising a practical scheme of reform. The Supreme and Provincial Governments have made various attempts during 40 years past to solve the problem of universal units of weights and measures and commerce and trade have agitated about the question for the past century. The Indian railways and Government departments adopted a standard tola (180 grains), seer (80 tolas) and maund (40 seers) and it was hoped that this would act as a successful "lead" which would gradually be followed by trade throughout the empire, but the expectation has not been realised.

The Government of India considered the whole question in consultation with the provincial Governments in 1890-1894 and various special steps have at different times been taken in different parts of India. The Government of Bombay appointed a committee in 1911 to make proposals for reform for the Bombay Presidency. Their final report has not been published, but they presented in 1912 an *ad interim* report which has been issued for public discussion. In brief, it points out the practical impossibility of proceeding by compulsory measures affecting the whole of India. The Committee stated that over the greater part of the Bombay Presidency a standard of weights and measures would be heartily welcome by the people. They thought that legislation compulsorily applied over large areas subject to many diverse conditions of trade and social life would not result in bringing about the desired reform so successfully as a "lead" supplied by local legislation based on practical experience. The want of coherence, *savoir faire*, or the means of co-operation among the people at large pointed to this conclusion. The Committee pointed out that a good example of the results that will follow a good lead is apparent in the East Khandesh District of the Presidency, where the District Officer, Mr. Simcox, gradually, during the course of three years, induced the people to adopt throughout the district uniform weights and measures, the unit of weight in this case being a tola of 180 grains. But the committee abstained from recommending that the same weights and measures should be adopted over the whole Presidency, preferring that a new system started in any area should be as nearly as possible similar to the best system already prevailing there.

Committee of 1913.—The whole problem was again brought under special consideration by the Government of India in October, 1913, when the following committee was appointed to inquire into the entire subject anew:—

Mr. C. A. Silberrard (*President*).
Mr. A. Y. G. Campbell.
Mr. Rustomji Fardoonji.

This Committee reported, in August, 1915, in favour of a uniform system of weights to be adopted in India based on the 180 grain tola. The report says:—Of all such systems there is no doubt that the most widespread and best known is that known as the Bengal or Indian Railway weights. The introduction of this system involves a more or less considerable change of system in parts of the United Provinces (Gorakhpur, Bareilly and neighbouring areas), practically the whole of Madras, parts of the Punjab (rural portions of Amritsar and neighbouring districts), of Bombay (South Bombay, Bombay city and Gujarat), and the North-West Frontier Province. Burma has at present a separate system of its own which the committee think it should be permitted to retain. The systems recommended are:—

FOR INDIA.

8 khaskhas	= 1 chawal
8 chawals	= 1 ratti
8 rattis	= 1 masha
12 mashes or 4 tanks	= 1 tola
5 tolas	= 1 chatak
16 chataks	= 1 seer
40 seers	= 1 maund

FOR BURMA.

2 small ywes	= 1 large ywe
4 large ywes	= 1 pe
2 pes	= 1 mu
5 pes or 2½ mus	= 1 mat
1 mat	= 1 ngamu
2 ngamus	= 1 tikal
100 tikals	= 1 peiktha or viss.

The tola is the tola of 180 grains, equal to the rupee weight. The viss has recently been fixed at 3·60 lbs. or 140 tolas.

Government Action.—The Government of India at first approved the principles of the Report and left the Provincial Governments to take action, but they passed more detailed orders in January, 1922. In these they again, for the present and subject to the restrictions imposed by the Government of India Act and the devolution rules, left it entirely to local Governments to take such action as they think advisable to standardise dry and liquid measures of capacity within their provinces. Similarly, they announced their decision not to adopt all-India standards of length or area.

As regards weights they decided in favour of the standard mentioned under the heading "Weights", near the commencement of this article, this having been recommended by a majority of the Weights and Measures Committee and having received the unanimous support of the Local Governments. At the same time they provisionally undertook to assist provincial legislation or standardisation and stated that "if subsequently, opinion develops strongly in favour of the Imperial standardisation of weights, the Government of India will be prepared to under take such legislation, but at present they consider that any such step would be premature

The History of India in Outline.

No history of India can be proportionate, and the briefest summary must suffer from the same defect. Even a wholesale acceptance as history of mythology, tradition, and folklore will not make good, though it makes picturesque, the many gaps that exist in the early history of India: and, though the labours of modern geographers and archæologists have been amazingly fruitful, it cannot be expected that these gaps will ever be filled to any appreciable extent. Approximate accuracy in chronology and an outline of dynastic facts are all that the student can look for up to the time of Alexander, though the briefest excursion into the by-ways of history will reveal to him many alluring and mysterious fields for speculation. There are, for example, to this day castes that believe they sprang originally from the loins of a being who landed "from an impossible boat on the shores of a highly improbable sea"; and the great epic poems contain plentiful statements equally difficult of reconciliation with modern notions of history as a science. But from the Jataka stories and the Puranas, much valuable information is to be obtained, and, for the benefit of those unable to go to these and other original sources, it has been distilled by a number of writers.

The orthodox Hindu begins the political history of India more than 3,000 years before Christ, with the war waged on the banks of the Jumna between the sons of Kuru and the sons of Pandu. Recent excavations by the Archæological Department in the Indus Valley at Harappa in the Punjab, but more particularly at Mohenjo Daro in Sind, carry us back even further. They have uncovered sites of cities bearing the marks and containing the relics of a high civilisation stated by the Department to be Sumerian. The excavations are proceeding under special direction and have excited the greatest interest in scientific circles throughout the world, but the general critic omits several of those remote centuries and takes 600 B.C., or thereabouts as his starting point. At that time much of the country was covered with forest, but the Aryan races, who had entered India from the north, had established in parts a form of civilization far superior to that of the aboriginal savages and to this day there survive cities, like Benares, founded by those invaders. In like manner the Dravidian invaders from an unknown land, who overran the Deccan and the Southern part of the Peninsula, crushed the aborigines, and at a much later period, were themselves subdued by the Aryans. Of these two civilizing forces, the Aryan is the better known, and of the Aryan kingdoms the first of which there is authentic record is that of Magadha, or Bihar, on the Ganges. It was in, or near, this powerful kingdom that Jainism and Buddhism had their origin, and the fifth King of Magadha, Bimbisara by name, was the friend and patron of Gautama Buddha. The King mentioned was a contemporary of Darius, autocrat of Persia (521 to 485 B.C.) who annexed the Indus valley and formed from his conquest an Indian satrapy which paid as tribute the equivalent of about one million sterling. Detailed history, however, does not become possible until the invasion of Alexander in 326 B.C

Alexander the Great.

That great soldier had crossed the Hindu Kush in the previous year and had captured Aornos, on the Upper Indus. In the spring of 326 he crossed the river at Ohind, received the submission of the King of Taxila, and marched against Porus who ruled the fertile country between the rivers Hydaspes (Jhelum) and Akesines (Chenab). The Macedonian carried all before him, defeating Porus at the battle of the Hydaspes, and crossing the Chenab and Ravi. But at the River Hyphasis (Bias) his weary troops mutinied, and Alexander was forced to turn back and retire to the Jhelum where a fleet to sail down the rivers to the sea was nearly ready. The wonderful story of Alexander's march through Mekran and Persia to Babylon, and of the voyage of Nearchus up the Persian Gulf is the climax to the narrative of the invasion but is not part of the history of India. Alexander had stayed nineteen months in India and left behind him officers to carry on the Government of the kingdoms he had conquered: but his death at Babylon, in 323, destroyed the fruits of what has to be regarded as nothing but a brilliant raid, and within two years his successors were obliged to leave the Indian provinces, heavily scarred by war but not hellenized.

The leader of the revolt against Alexander's generals was a young Hindu, Chandragupta, who was an illegitimate member of the Royal Family of Magadha. He dethroned the ruler of that kingdom, and became so powerful that he is said to have been able to place 600,000 troops in the field against Seleucus, to whom Babylon had passed on the death of Alexander. This was too formidable an opposition to be faced, and a treaty of peace was concluded between the Syrian and Indian monarchs which left the latter the first paramount Sovereign of India (321 B.C.) with his capital at Pataliputra, the modern Patna and Bankipore. Of Chandragupta's court and administration a very full account is preserved in the fragments that remain of the history compiled by Megasthenes, the ambassador sent to India by Seleucus. His memorable reign ended in 297 B.C. when he was succeeded by his son Bindusara, who in his turn was succeeded by Asoka (269—231 B.C.) who recorded the events of his reign in numerous inscriptions. This king, in an unusually bloody war, added to his dominions the kingdom of Kalinga (the Northern Circars) and then becoming a convert to Buddhism, resolved for the future to abstain from conquest by force of arms. The consequences of the conversion of Asoka were amazing. He was not intolerant of other religions, and did not endeavour to force his creed on his "children". But he initiated measures for the propagation of his doctrine with the result that "Buddhism, which had hitherto been a merely local sect in the valley of the Ganges, was transformed into one of the greatest religions of the world—the greatest, probably, if measured by the number of adherents. This is Asoka's claim to be remembered; this it is which makes his reign an epoch, not only in the history of India, but in that of the world." The wording of his edicts reveal him as a great king as well as a great missionary, and it is to be hoped that the excavations now being carried on in the ruins of his palace may throw yet more light on his character and times. On his death the Maurya kingdom fell to pieces. Even during his

reign there had been signs of new forces at work on the borderland of India; where the independent kingdoms of Bactria and Parthia had been formed, and subsequent to it there were frequent Greek raids into India. The Greeks in Bactria, however, could not withstand the overwhelming force of the westward migration of the Yueh-chi horde, which, in the first century A.D., also ousted the Indo-Parthian kings from Afghanistan and North-Western India.

The first of these Yueh-chi kings to annex a part of India was Kadphises II (A.D. 85—125), who had been defeated in a war with China, but crossed the Indus and consolidated his power eastward as far as Benares. His son Kanishka (whose date is much disputed) left a name which to Buddhists stands second only to that of Asoka. He greatly extended the boundaries of his empire in the North, and made Peshawar his capital. Under him the power of the Kushan clan of the Yueh-chi reached its zenith and did not begin to decay until the end of the second century, concurrently with the rise in middle India of the Andhra dynasty which constructed the Amaravati stupa, "one of the most elaborate and precious monuments of piety ever raised by man."

The Gupta Dynasty.

Early in the fourth century there arose, at Pataliputra, the Gupta dynasty which proved of great importance. Its founder was a local chief, his son Samudragupta, who ruled for some fifty years from A.D. 326, was a king of the greatest distinction. His aim of subduing all India was not indeed fulfilled but he was able to exact tribute from the kingdoms of the South and even from Ceylon, and, in addition to being a warrior, he was a patron of the arts and of Sanskrit literature. The rule of his son, Chandragupta, was equally distinguished and is commemorated in an inscription on the famous iron pillar near Delhi, as well as in the writings of the Chinese pilgrim Fa-hien who pays a great tribute to the equitable administration of the country. It was not until the middle of the fifth century that the fortunes of the Gupta dynasty began to wane—in face of the onset of the White Huns from Central Asia—and by 480 the dynasty had disappeared. The following century all over India was one of great confusion, apparently marked only by the rise and fall of petty kingdoms, until a monarch arose, in A.D. 606, capable of consolidating an Empire. This was the Emperor Harsha who, from Thanasar near Ambala, conquered Northern India and extended his territory South to the Nerbudda. Imitating Asoka in many ways, this Emperor yet "felt no embarrassment in paying adoration in turn to Siva, the Sun, and Buddha at a great public ceremonial." Of his times a graphic picture has been handed down in the work of a Chinese "Master of the Law," Hiuen Tsiang by name. Harsha was the last native paramount sovereign of Northern India; on his death in 643 his throne was usurped by a Minister, whose treacherous conduct towards an embassy from China was quickly avenged, and the kingdom so laboriously established lapsed into a state of internecine strife which lasted for a century and a half.

The Andhras and Rajputs.

In the meantime in Southern India the Andhras had attained to great prosperity and carried on a considerable trade with Greece, Egypt and Rome; as well as with the East. Their domination ended in the fifth century A.D. and a number of new dynasties, of which the Pallavas were the most important, began to appear. The Pallavas made way in turn for the Chalukyas, who for two centuries remained the most important Deccan dynasty, one branch uniting with the Cholas. But the fortunes of the Southern dynasties are so involved, and in many cases so little known, that to recount them briefly is impossible. Few names of note stand out from the record except those of Vikramaditya (11th century) and a few of the later Hindu rulers who made a stand against the growing power of Islam; of the rise of which an account is given below. In fact the history of mediæval India is singularly devoid of unity. Northern India was in a state of chaos from about 650 to 950 A.D. not unlike that which prevailed in Europe of that time, and materials for the history of these centuries are very scanty. In the absence of any powerful rulers the jungle began to gain back what had been wrested from it: ancient capitals fell into ruins from which in some cases they have not even yet been disturbed, and the aborigines and various foreign tribes began to assert themselves so successfully that the Aryan element was chiefly confined to the Doab and the Eastern Punjab. It is not therefore so much for the political as for the religious and social history of this anarchical period that one must look. And the greatest event—if a slow process may be called an event—of the middle ages was the transition from tribe to caste, the final disappearance of the old four-fold division of Brahmans; Kshattriyas, Vaisyas, and Sudras, and the formation of the new division of pure and impure largely resting upon a classification of occupations. But this social change was only a part of the development of the Hindu religion into a form which would include in its embrace the many barbarians and foreigners in the country who were outside it. The great political event of the period was the rise of the Rajputs as warriors in the place of the Kshattriyas. Their origin is obscure but they appeared in the 8th century and spread, from their two original homes in Rajputana and Oudh, into the Punjab, Kashmir, and the Central Himalayas, assimilating a number of fighting clans and binding them together with a common code. At this time Kashmir was a small kingdom which exercised an influence on India wholly disproportionate to its size. The only other kingdom of importance was that of Kanauj—in the Doab and Southern Oudh—which still retained some of the power to which it had reached in the days of Harsha, and of which the renown extended to China and Arabia.

With the end of the period of anarchy, the political history of India centres round the Rajputs. One clan founded the kingdom of Gujarat, another held Malwa, another (the Chauhans) founded a kingdom of which Ajmer was the capital, and so on. Kanauj fell into the hands of the Rathors (circ 1040 A.D.) and the dynasty then founded by that branch of the Gaharwars of Benares became one of the most famous in India. Later in the same century the Chauhans were united, and by

1163 one of them could boast that he had conquered all the country from the Vindhyas to the Himalayas, including Delhi already a fortress a hundred years old. The son of this conqueror was Prithwi Raj, the champion of the Hindus against the Mahomedans. With his death in battle (1192) ends the golden age of the new civilization that had been evolved out of chaos; and of the greatness of that age there is a splendid memorial in the temples and forts of the Rajput states and in the two great philosophical systems of Sankaracharya (ninth century) and Ramanuja (twelfth century). The triumph of Hinduism had been achieved, it must be added, at the expense of Buddhism, which survived only in Magadha at the time of the Mahomedan conquest and speedily disappeared there before the new faith.

Mahomedan India.

The wave of Mahomedan invaders that eventually swept over the country first touched India, in Sind, less than a hundred years after the death of the Prophet in 632. But the first real contact was in the tenth century when a Turkish slave of a Persian ruler founded a kingdom at Ghazni, between Kabul and Kandahar. A descendant of his, Mahmud (967-1030) made repeated raids into the heart of India, capturing places so far apart as Multan, Kanauj, Gwalior, and Somnath in Kathiawar, but permanently occupying only a part of the Punjab. Enduring Mahomedan rule was not established until the end of the twelfth century, by which time, from the little territory of Ghor, there had arisen one Mahomed Ghori capable of carving out a kingdom stretching from Peshawar to the Bay of Bengal. Prithwi Raj, the Chauhan ruler of Delhi and Ajmer, made a brave stand against, and once defeated, one of the armies of this ruler, but was himself defeated in the following year. Mahomed Ghori was murdered at Lahore (1206) and his vast kingdom, which had been governed by satraps, was split up into what were practically independent sovereignties. Of these satraps, Qutb-ud-din, the slave ruler of Delhi and Lahore, was the most famous, and is remembered by the great mosque he built near the modern Delhi. Between his rule and that of the Mughals, which began in 1526, only a few of the many Kings who governed and fought and built beautiful buildings, stand out with distinction. One of these was Ala-ud-din (1296-1316), whose many expeditions to the south much weakened the Hindu Kings, and who proved himself to be a capable administrator. Another was Firoz Shah, of the house of Tughlaq, whose administration was in many respects admirable, but which ended, on his abdication, in confusion. In the reign of his successor, Mahmud (1398-1413), the kingdom of Delhi went to pieces and India was for seven months at the mercy of the Turkish conqueror Taimur. It was the end of the fifteenth century before the kingdom, under Sikandar Lodi, began to recover. His son, Ibrahim, still further extended the kingdom that had been recreated, but was defeated by Babar, King of Kabul, at Panipat, near Delhi, in 1526, and there was then established in India the Mughal dynasty.

The Mahomedan dynasties that had ruled in capital other than Delhi up to this date were of comparative unimportance, though some great men appeared among them. In Gujarat, for example, Ahmad Shah, the founder of Ahmedabad, showed himself a good ruler and builder as well as a good soldier, though his grandson, Mahmud Shah Begara, was a greater ruler—acquiring fame at sea as well as on land. In the South, various kings of the Bahmani dynasty made names for themselves, especially in the long wars they waged on the new Hindu kingdom that had arisen which had its capital at Vijayanagar. Of importance also was Adil Khan, a Turk, who founded (1490) the Bijapur dynasty of Adil Shahis. It was one of his successors who crushed the Vijayanagar dynasty, and built the great mosque for which Bijapur is famous.

The Mughal Empire.

As one draws near to modern times it becomes impossible to present anything like a coherent and consecutive account of the growth of India as a whole. Detached threads in the story have to be picked up one by one and followed to their ending, and although the sixteenth century saw the first European settlements in India, it will be convenient here to continue the narrative of Mahomedan India almost to the end of the Mughal Empire. How Babar gained Delhi has already been told. His son, Humayun, greatly extended his kingdom, but was eventually defeated (1540) and driven into exile by Sher Khan, an Afghan of great capabilities, whose short reign ended in 1545. The Sur dynasty thus founded by Sher Khan lasted another ten years when Humayun having snatched Kabul from one of his brothers, was strong enough to win back part of his old kingdom. When Humayun died (1556) his eldest son, Akbar, was only 13 years old and was confronted by many rivals. Nor was Akbar well served, but his career of conquest was almost uninterrupted and by 1594 the whole of India North of the Nerbudda had bowed to his authority, and he subsequently entered the Deccan and captured Ahmednagar. This great ruler, who was as remarkable for his religious tolerance as for his military prowess, died in 1605, leaving behind him a record that has been surpassed by few. His son, Jehangir, who married the Persian lady Nur Jahan, ruled until 1627, bequeathing to an admiring posterity some notable buildings—the tomb of his father at Sikandra, part of the palace of Agra, and the palace and fortress of Lahore His son, Shahjahan, was for many years occupied with wars in the Deccan, but found time to make his court of incredible magnificence and to build the most famous and beautiful of all tombs, the Taj Mahal, as well as the fort, palace and Juma Masjid at Delhi. The quarrels of his sons led to the deposition of Shahjahan by one of them, Aurangzeb, in 1658. This Emperor's rule was one of constant intrigue and fighting in every direction, the most important of his wars being a twenty-five years' struggle against the Marathas of the Deccan who, under the leadership of Sivaji, became a very powerful faction in Indian politics. His bigoted attitude towards Hinduism made Aurangzeb all the more anxious to establish his Empire on a firm basis in the south, but he was unable to hold his many conquests, and on his death (1707) the

Empire, for which his three sons were fighting, could not be held together. Internal disorder and Maratha encroachments continued during the reigns of his successors, and in 1739 a fresh danger appeared in the person of Nadir Shah, the Persian conqueror, who carried all before him. On his withdrawal, leaving Mahomed Shah on the throne, the old intrigues recommenced and the Marathas began to make the most of the opportunity offered to them by puppet rulers at Delhi and by almost universal discord throughout what had been the Mughal Empire. There is little to add to the history of Mahomedan India. Emperors continued to reign in name at Delhi up to the middle of the 19th century, but their territory and power had long since disappeared, being swallowed up either by the Marathas or by the British.

European Settlements.

The voyage of Vasco da Gama to India in 1498 was what turned the thoughts of the Portuguese to the formation of a great Empire in the East. That idea was soon realized, for from 1500 onwards, constant expeditions were sent to India and the first two Viceroys in India—Almeida and Albuquerque—laid the foundations of a great Empire and of a great trade monopoly. Goa, taken in 1510, became the capital of Portuguese India and remains to this day in the hands of its captors, and the countless ruins of churches and forts on the shores of Western India, as also farther East at Malacca, testify to the zeal with which the Portuguese endeavoured to propagate their religion and to the care they took to defend their settlements. There were great soldiers and great missionaries among them—Albuquerque, da Cunha, da Castro in the former class, St. Francis Xavier in the latter. But the glory of Empire loses something of its lustre when it has to be paid for, and the constant drain of men and money from Portugal, necessitated by the attacks made on their possessions in India and Malaya, was found almost intolerable. The junction of Portugal with Spain, which lasted from 1580 to 1640, also tended to the downfall of the Eastern Empire and when Portugal became independent again, it was unequal to the task of competing in the East with the Dutch and English. The Dutch had little difficulty in wresting the greater part of their territory from the Portuguese, but the seventeenth century naval wars with England forced them to relax their hold upon the coast of India, and during the French wars between 1795 and 1811 England took all Holland's Eastern possessions, and the Dutch have left in India but few traces of their civilisation and of the once powerful East India Company of the Netherlands.

The first English attempts to reach India date from 1496 when Cabot tried to find the North-West passage, and these attempts were repeated all through the sixteenth century. The first Englishman to land in India is said to have been one Thomas Stephens (1579) who was followed by a number of merchant adventurers, but trade between the two countries really dates from 1600 when Elizabeth incorporated the East India Company which had been formed in London. Factories in India were founded only after Portuguese and Dutch position had been overcome, notably in the sea fight off Swally (Suvali) in 1612. The first factory, at Surat, was for many years the most important English foothold in the East. Its establishment was followed by others, including Fort St. George, Madras, (1640) and Hughli (1651). In the history of these early years of British enterprise in India the cession of Bombay (1661) as part of the dower of Catherine of Braganza stands out as a land-mark; it also illustrates the weakness of the Portuguese at that date, since in return the King of England undertook to protect the Portuguese in India against their foes—the Marathas and the Dutch. Cromwell, by his treaty of 1654, had already obtained from the Portuguese an acknowledgment of England's right to trade in the East; and that right was now threatened, not by the Portuguese, but by Sivaji and by the general disorder prevalent in India. Accordingly, in 1686, the Company turned its attention to acquiring territorial power, and announced its intention to establish such a policy of civil and military power, and create and secure such a large revenue......as may be the foundation of a large, well-grounded, sure English dominion in India for all time to come. Not much came of this announcement for some time, and no stand could be made in Bengal against the depredations of Aurangzeb. The foundations of Calcutta (1690) could not be laid by Job Charnock until after a humiliating peace had been concluded with that Emperor, and, owing to the difficulties in which the Company found itself in England, there was little chance of any immediate change for the better. The union of the old East India Company with the new one which had been formed in rivalry to it took place in 1708, and for some years peaceful development followed; though Bombay was always exposed by sea to attacks from the pirates, who had many strongholds within easy reach of that port, and on land to attacks from the Marathas. The latter danger was felt also in Calcutta. Internal dangers were numerous and still more to be feared. More than one mutiny took place among the troops sent out from England, and rebellions like that led by Keigwin in Bombay threatened to stifle the infant settlements. The public health was bad and the rate of mortality was at times appalling. To cope with such conditions strong men were needed, and the Company was in this respect peculiarly fortunate; the long list of its servants, from Oxenden and Aungier to Hastings and Raffles, contains many names of men who proved themselves good rulers and far-sighted statesmen, the finest Empire-builders the world has known.

Attempts to compete with the English were made of course. But the schemes of the Emperor Charles VI to secure a share of the Indian trade were not much more successful than those made by Scotland, Denmark, Sweden, and Russia. By the French, who founded Pondicherry and Chandernagore towards the end of the 17th century, much more was achieved, as will be seen from the following outline of the development of British rule.

The French Wars.

When war broke out between England and France in 1744, the French had acquired a

strong position in Southern India, which had become independent of Delhi and was divided into three large States—Hyderabad, Tanjore, and Mysore—and a number of petty states under local chieftains. In the affairs of these States Dupleix, when Governor of Pondicherry, had intervened with success, and when Madras was captured by a French squadron, under La Bourdonnais (1746) Dupleix wished to hand it over to the Nawab of Arcot—a deputy of the Nizam's who ruled in the Carnatic. The French, however, kept Madras, repelling an attack by the disappointed Nawab as well as the British attempts to recapture it. The treaty of Aix-la-Chapelle restored Madras to the English. The fighting had shown the Indian powers the value of European troops, and this was again shown in the next French war (1750-54) when Clive achieved enduring fame by his capture and subsequent defence of Arcot. This war arose from Dupleix supporting candidates for the disputed successions at Arcot and Hyderabad while the English at Madras put forward their own nominees. One of Dupleix's officers, the Marquis de Bussy, persuaded the Nizam to take into his pay the army which had established his power, and in return the Northern Circars, between Orissa and Madras, was granted to the French. This territory, however, was captured by the English in the seven years' war (1756-63). Dupleix had by then been recalled to France. Lally, who had been sent to drive the English out of India, captured Fort St. David and invested Madras. But the victory which Colonel (Sir Eyre) Coote won at Wandiwash (1760) and the surrender of Pondicherry and Gingee put an end to the French ambitions of Empire in Southern India. Pondicherry passed more than once from the one nation to the other before settling down to its present existence as a French colony in miniature.

Battle of Plassey.

While the English were fighting the third French war in the South they became involved in grave difficulties in Bengal, where Siraj-ud-Daula had acceded to power. The headquarters of the English at Calcutta were threatened by that ruler who demanded they should surrender a refugee and should cease building fortifications. They refused and he marched against them with a large army. Some of the English took to their ships and made off down the river, the rest surrendered and were cast into the jail known as the "Black Hole." From this small and stifling room 23 persons, out of 146, came out alive the next day. Clive who was at Madras, immediately sailed for Calcutta with Admiral Watson's squadron, recaptured the town (1757), and, as war with the French had been proclaimed, proceeded to take Chandernagore. The Nawab Siraj-ud-Daula then took the side of the French, and Clive, putting forward Mir Jafar as candidate for the Nawab's throne, marched out with an army consisting of 900 Europeans, 2,000 sepoys and 8 pieces of artillery against the Nawab's host of over 50,000. The result was the historic battle of Plassey (June 23) in which Clive, after hesitating on the course to be pursued, routed the Nawab. Mir Jafar was put on the throne at Murshidabad, and the price of this honour was put at £2,340,000 in addition to the grant to the Company of the land round Calcutta now known as the District of the twenty-four Parganas. In the year after Plassey, Clive was appointed Governor of Bengal and in that capacity sent troops against the French in Madras and in person led a force against the Oudh army that was threatening Mir Jafar, in each case with success. From 1760 to 1765 Clive was in England. During his absence the Council at Calcutta deposed Mir Jafar and, for a price, put Mir Kasim in his place. This ruler moved his capital to Monghyr, organized an army, and began to intrigue with the Nawab Wazir of Oudh. He soon found, in a dispute over customs dues, an opportunity of quarrelling with the English and the first shots fired by his followers were the signal for a general rising in Bengal. About 200 Englishmen and a number of sepoys were massacred, but his trained regiments were defeated at Gheria and Oodeynullah, and Mir Kasim sought protection from the Nawab of Oudh. But in 1764, after quelling a sepoy mutiny in his own camp by blowing 24 ring leaders from the guns, Major (Sir Hector) Munro defeated the joint forces of Shah Alam, the Mughal Emperor, and the Nawab of Oudh in the battle of Buxar. In 1765 Clive (now Baron Clive of Plassey) returned as Governor. "Two landmarks stand out in his policy. First, he sought the substance, although not the name, of territorial power, under the fiction of a grant from the Mughal Emperor. Second, he desired to purify the Company's service, by prohibiting illicit gains, and by guaranteeing a reasonable pay from honest sources. In neither respect were his plans carried out by his immediate successors. But our efforts towards a sound administration date from this second Governorship of Clive, as our military supremacy dates from his victory at Plassey." Before Clive left India, in 1767, he had readjusted the divisions of Northern India and had set up a system of Government in Bengal by which the English received the revenues and maintained the army while the criminal jurisdiction was vested in the Nawab. The performance of his second task, the purification of the Company's service, was hotly opposed but carried out. He died in 1774 by his own hand, the House of Commons having in the previous year censured him, though admitting that he did render "great and meritorious services to his country."

Warren Hastings.

The dual system of government that Clive had set up proved a failure and Warren Hastings was appointed Governor, in 1772, to carry out the reforms settled by the Court of Directors which were to give them the entire care and administration of the revenues. Thus Hastings had to undertake the administrative organization of India, and, in spite of the factious attitude of Philip Francis, with whom he fought a duel and of other members of his Council, he reorganized the civil service, reformed the system of revenue collection, greatly improved the financial position of the Company; and created courts of justice and some semblance of a police force. From 1772 to 1774 he was Governor of Bengal, and from 1774 to 1775

he was the first Governor-General, nominated under an Act of Parliament passed in the previous year. His financial reforms, and the forced contributions he enacted from the rebellious Chet Singh and the Begam of Oudh, were interpreted in England as acts of oppression and formed, together with his action in the trial of Nuncomar for forgery, the basis of his seven years' trial before the House of Lords which ended in a verdict of not guilty on all the charges. But there is much more for which his administration is justly famous. The recovery of the Marathas from their defeat at Panipat was the cardinal factor that influenced his policy towards the native states. One frontier was closed against Maratha invasion by the loan of a British brigade to the Nawab Wazir of Oudh, for his war against the Rohillas, who were intriguing with the Marathas. In Western India he found himself committed to the two Maratha wars (1775-82) owing to the ambition of the Bombay Government to place its own nominee on the throne of the Peshwa at Poona, and the Bengal troops that he sent over made amends, by the conquest of Gujrat and the capture of Gwalior, for the disgrace of Wadgaon where the Marathas overpowered a Bombay army. In the South—where interference from Madras had already led (1769) to what is known as the first Mysore war, a disastrous campaign against Hyder Ali and the Nizam—he found the Madras Government again in conflict with those two potentates. The Nizam he won over by diplomacy, but against Hyder Ali he had to despatch a Bengal army under Sir Eyre Coote. Hyder Ali died in 1782 and two years later a treaty was made with his son Tipu. It was in these acts of intervention in distant provinces that Hastings showed to best advantage as a great and courageous man, cautious, but swift in action when required. He was succeeded, after an interregnum, by Lord Cornwallis (1786-93) who built on the foundations of civil administration laid by Hastings, by entrusting criminal jurisdiction to Europeans and establishing an Appellate Court of Criminal Judicature at Calcutta. In the Civil Service he separated the functions of the District Collector and Judge and organized the "writers" and "merchants" of the Company into an administrative Civil Service. This system was subsequently extended to Madras and Bombay. Lord Cornwallis is better known for his introduction, on orders from England, of the Permanent Settlement in Bengal. (See article on Land Revenue). A third Mysore war was waged during his tenure of office which ended in the submission of Tipu Sultan. Sir John Shore (Lord Teignmouth), an experienced Civil Servant, succeeded Lord Cornwallis, and, in 1798, was followed by Lord Wellesley, the friend of Pitt, whose projects were to change the map of India

Lord Wellesley's Policy.

The French in general, and "the Corsican" in particular, were the enemy most to be dreaded for a few years before Lord Wellesley took up his duties in India, and he formed the scheme of definitively ending French schemes in Asia by placing himself at the head of a great Indian confederacy. He started by obtaining from the Nawab of Oudh the cession of large tracts of territory in lieu of payment; overdue as subsidies for British troops, he then won over the Nizam to the British side, and, after exposing the intrigues of Tipu Sultan with the French, embarked on the fourth Mysore war which ended (1799) in the fall of Seringapatam and the gallant death of Tipu. Part of Mysore, the Carnatic, and Tanjore roughly constituting the Madras Presidency of to-day then passed to British rule. The five Maratha powers—the Peshwa of Poona, the Gaekwar of Baroda, Sindhia of Gwalior, Holkar of Indore and the Raja of Nagpur—had still to be brought into the British net. The Peshwa, after being defeated by Holkar, fled to British territory and signed the Treaty of Bassein which led to the third Maratha war (1802-04) as it was regarded by Sindhia and the Raja of Nagpur at a betrayal of Maratha independence. In this the most successful of British campaigns in India, Sir Arthur Wellesley (the Duke of Wellington) and General (Lord) Lake carries all before them, the one by his victories of Assaye and Argaum and the other at Aligad, and Laswari. Later operations, such as Colonel Monson's retreat through Central India were less fortunate. The great acquisitions of territory made under Lord Wellesley proved so expensive that the Court of Directors, becoming impatient, sent out Lord Cornwallis a second time to make peace at any price. He, however, died soon after his arrival in India; and Sir George Barlow carried on the government (1805-7) until the arrival of a stronger ruler, Lord Minto. He managed to keep the peace in India for six years, and to add to British dominions by the conquest of Java and Mauritius. His foreign policy was marked by another new departure, inasmuch as he opened relations with the Punjab, Persia, and Afghanistan, and concluded a treaty with Ranjit Singh, at Lahore, which made that Sikh ruler the loyal ally of the British for life.

The successor of Lord Minto was Lord Moira; who found himself obliged almost at once to declare war on the Gurkhas of Nepal, who had been encroaching on British territory. After initial reverses, the English, under General Ochterlony, were successful and the Treaty of Sagauli (1816) was drawn up which defines British relations with Nepal to the present day. For this success Lord Moira was made Marquis of Hastings. In the same year he made preparations for the last Maratha war (1817-18) which was made necessary by the lawless conduct of the Pindaris, gangs of Pathan or Rohilla origin, whose chief patrons were the rulers of Native States. The large number of 120,000 that he collected for this purpose destroyed the Pindaris, annexed the dominions of the rebellious Peshwa of Poona, protected the Rajput States, made Sindhia enter upon a new treaty, and compelled Holkar to give up part of his territory. Thus Lord Hastings established the British power more firmly than ever, and when he resigned, in 1823, all the Native States outside the Punjab had become parts of the political system and British interests were permanently secured from the Persian Gulf to Singapore. Lord Amherst followed Lord Hastings, and his five years' rule (1823-28) are memorable for the first Burmese war and the capture of Bharatpur. The former opera-

tion was undertaken owing to the insolent demands and raids of the Burmese, and resulted in the Burmese ceding Assam, Aracan, and the coast of Martaban and their claims to the lower provinces. The capture of Bharatpur by Lord Combermere (1826) wiped out the repulse which General Lake had received there twenty years earlier. A disputed succession on this occasion led to the British intervention.

Social Reform.

A former Governor of Madras, Lord William Bentinck, was the next Governor-General. His epitaph by Macaulay, says: "He abolished cruel rites; he effaced humiliating distinctions; he gave liberty to the expression of public opinion; his constant study was to elevate the intellectual and moral character of the nations committed to his charge."

Some of his financial reforms, forced on him from England, and his widening of the gates by which educated Indians could enter the service of the Company, were most unpopular at the time, but were eclipsed by the acts he took for the abolition of *Sati*, or widow-burning, and the suppression—with the help of Captain Sleeman—of the professional hereditary assassins known as *Thags*. In 1832 he annexed Cachar, and, two years later, Coorg. The incompetence of the ruler of Mysore forced him to take that State also under British administration—where it remained until 1881. His rule was marked in other ways by the despatch of the first steamship that made the passage from Bombay to Suez, and by his settlement of the long educational controversy in favour of the advocates of instruction in English and the vernaculars. Lord William Bentinck left India (1835) with his programme of reforms unfinished. The new Charter Act of 1833 had brought to a close the commercial business of the Company and emphasized their position as rulers of an Indian Empire in trust for the Crown. By it the whole administration, as well as the legislation of the country, was placed in the hands of the Governor-General in Council, and authority was given to create a Presidency of Agra. Before his retirement Bentinck assumed the statutory title of Governor-General of India (1834), thus marking the progress of consolidation since Warren Hastings in 1774 became the first Governor-General of Fort William. Sir Charles Metcalfe, being senior member of Council, succeeded Lord William Bentinck, and during his short tenure of office carried into execution his predecessor's measures for giving entire liberty to the press.

Afghan Wars.

With the appointment of Lord Auckland as Governor-General (1836-42) there began a new era of war and conquest. Before leaving London he announced that he looked with exultation to the prospect of "promoting education and knowledge, and of extending the blessings of good Government and happiness to millions in India;" but his administration was almost exclusively comprised in a fatal expedition to Afghanistan, which dragged in its train the annexation of Sind, the Sikh wars, and the inclusion of Baluchistan in the protectorate of India. The first Afghan war was undertaken partly to counter the Russian advance in Central Asia and partly to place on the throne at Kabul the dethroned ruler Shah Shuja in place of Dost Mahomed. The latter object was easily attained (1839) and for two years Afghanistan remained in the military occupation of the British. In 1841 Sir Alexander Burnes was assassinated in Kabul and Sir William Macnaghten suffered the same fate in an interview with the son of Dost Mahomed. The British Commander in Kabul, Gen. Elphinstone, was old and feeble, and after two months' delay he led his army of 4,500 and 12,000 camp followers back towards India in the depth of winter. Between Kabul and Jallalabad the whole force perished, either at the hands of the Afghans or from cold, and Dr. Brydon was the only survivor who reached the latter city. Lord Ellenborough succeeded Lord Auckland and was persuaded to send an army of retribution to relieve Jallalabad. One force under Gen. Pollock relieved Jallalabad and marched on Kabul, while Gen. Nott, advancing from Kandahar, captured Ghazni and joined Pollock at Kabul (1842). The bazaar at Kabul was blown up, the prisoners rescued, and the army returned to India leaving Dost Mahomed to take undisputed possession of his throne. The drama ended with a bombastic proclamation from Lord Ellenborough and the parade through the Punjab of the (spurious) gates of Somnath taken from the tomb of Mahmud of Ghazni.

Sikh Wars.

Lord Ellenborough's other wars—the conquest of Sind by Sir Charles Napier and the suppression of an outbreak in Gwalior—were followed by his recall, and the appointment of Sir Henry (1st Lord) Hardinge to be Governor-General. A soldier Governor-General was not unacceptable, for it was felt that a trial of strength was imminent between the British and the remaining Hindu power in India, the Sikhs. Ranjit Singh, the founder of the Sikh Kingdom, had died in 1839, loyal to the end to the treaty he had made with Metcalfe thirty years earlier. He left no son capable of ruling, and the *khalsa*, or central council of the Sikh army, was burning to measure its strength with the British sepoys. The intrigues of two men, Lal Singh and Fej Singh, to obtain the supreme power led to their crossing the Sutlej and invading British territory. Sir Hugh Gough, the Commander-in-Chief, and the Governor-General hurried to the frontier, and within three weeks four pitched battles were fought—at Mudki, Ferozeshah, Aliwal and Sobraon. The Sikhs were driven across the Sutlej and Lahore surrendered to the British, but the province was not annexed. By the terms of peace the infant Dhuleep Singh was recognized as Rajah; Major Henry Lawrence was appointed Resident, to assist the Sikh Council of Regency, at Lahore; the Jullundur Doab was added to British territory; the Sikh army was limited; and a British force was sent to garrison the Punjab on behalf of the child Rajah. Lord Hardinge returned to England (1848) and was succeeded by Lord Dalhousie, the greatest of Indian proconsuls.

Dalhousie had only been in India a few months when the second Sikh war broke out. In the attack on the Sikh position at Chillanwala the British lost 2,400 officers and men.

besides four guns and the colours of three regiments: but before reinforcements could arrive from England, bringing Sir Charles Napier as Commander-in-Chief, Lord Gough had restored his reputation by the victory of Gujrat which absolutely destroyed the Sikh army. As a consequence the Punjab was annexed and became a British province (1849), its pacification being so well carried out, under the two Lawrences that on the outbreak of the Mutiny eight years later it remained not only quiet but loyal. In 1852 Lord Dalhousie had again to embark on war, this time in Burma, owing to the ill-treatment of British merchants in Rangoon. The lower valley of the Irawaddy was occupied from Rangoon to Prome and annexed, under the name of Pegu, to those provinces that had been acquired in the first Burmese war. British territories were enlarged in many other directions during Lord Dalhousie's tenure of office. His "doctrine of lapse" by which British rule was substituted for Indian in States where continued misrule on the failure of a dynasty made this change possible, came into practice in the cases of Satara, Jhansi, and Nagpur (which last-named State became the Central Provinces) where the rulers died without leaving male heirs. Oudh was annexed on account of its misrule. Dalhousie left many other marks on India. He reformed the administration from top to bottom, founded the Public Works Department, initiated the railways, telegraphs and postal system, and completed the great Ganges canal. He also detached the Government of Bengal from the charge of the Governor-General, and summoned representatives of the local Governments to the deliberations of the Government of India. Finally, in education he laid down the lines of a department of public instruction and initiated more practical measures than those devised by his predecessors. It was his misfortune that the mutiny, which so swiftly followed his resignation, was by many critics in England attributed to his passion for change.

The Sepoy Mutiny.

Dalhousie was succeeded by Lord Canning in 1856, and in the following year the sepoys of the Bengal army mutinied and all the valley of the Ganges from Delhi to Patna rose in rebellion. The causes of this convulsion are difficult to estimate, but are probably to be found in the unrest which followed the progress of English civilisation; in the spreading of false rumours that the whole of India was to be subdued; in the confidence the sepoy troops had acquired in themselves under British leadership; and in the ambition of the educated classes to take a greater share in the government of the country. Added to this, there was in the deposed King of Delhi, Bahadur Shah, a centre of growing disaffection. Finally there was the story—not devoid of truth—that the cartridges for the new Enfield rifle were greased with fat that rendered them unclean for both Hindus and Mahomedans. And when the mutiny did break out it found the Army without many of its best officers who were employed in civil work, and the British troops reduced, in spite of Lord Dalhousie's warnings, below the number he considered essential for safety. On May 10 the sepoys at Meerut rose in mutiny, cut down a few Europeans, and, unchecked by the large European garrison, went off to Delhi where next morning the Mahomedans rose. From that centre the mutiny spread through the North-Western Provinces and Oudh into Lower Bengal. Risings in the Punjab were put down by Sir John Lawrence and his subordinates, who armed the Sikhs, and with their help reduced the sepoys, and Lawrence was subsequently able to send a strong body of Sikhs to aid in the siege of Delhi. The native armies of Madras and Bombay remained for the most part true to their colours. In Central India, the contingents of some of the great chiefs joined the rebels, but Hyderabad was kept loyal by the influence of its minister, Sir Salar Jung.

The interest of the war centres round Delhi, Cawnpore and Lucknow, though in other places massacres and fighting occurred. The siege of Delhi began on June 8 when Sir Henry Barnard occupied the Ridge outside the town. Barnard died of cholera early in July, and Thomas Reed, who took his place, was obliged through illness to hand over the command to Archdale Wilson. In August Nicholson arrived with a reinforcement from the Punjab. In the meantime the rebel force in Delhi was constantly added to by the arrival of new bodies of mutineers attacks were frequent and the losses heavy: cholera and sunstroke carried off many victims. on the Ridge: and when the final assault was made in September the Delhi army could only parade 4,720 infantry, of whom 1,960 were Europeans. The arrival of siege guns made it possible to advance the batteries on September 8, and by the 13th a breach was made On the following day three columns were led to the assault, a fourth being held in reserve. Over the ruins of the Kashmir Gate, blown in by Home and Salkeld, Col. Campbell led his men and Nicholson formed up his troops within the walls. By nightfall the British, with a loss of nearly 1,200 killed and wounded, had only secured a foothold in the city. Six days' street fighting followed and Delhi was won; but the gallant Nicholson was killed at the head of a storming party. Bahadur Shah was taken prisoner, and his two sons were shot by Captain Hudson.

Massacre at Cawnpore.

At Cawnpore the sepoys mutinied on June 27 and found in Nana Sahib, the heir of the last Peshwa, a willing leader in spite of his former professions of loyalty. There a European force of 240 with six guns had to protect 870 non-combatants, and held out for 22 days, surrendering only on the guarantee of the Nana that they should have a safe conduct as far as Allahabad. They were embarking on the boats on the Ganges when fire was opened on them, the men being shot or hacked to pieces before the eyes of their wives and children and the women being mutilated and murdered in Cawnpore to which place they were taken back. Their bodies were thrown down a well just before Havelock, having defeated the Nana's forces, arrived to the relief. In Lucknow a small garrison held out in the Residency from July 2 to September 25 against tremendous odds and enduring the most fearful hardships. The relieving force, under Havelock and Outram, was itself invested, and the garrison was

not finally delivered until Sir Colin Campbell arrived in November. Fighting continued for 18 months in Oudh, which Sir Colin Campbell finally reduced, and in Central India, where Sir Hugh Rose waged a brilliant campaign against the disinherited Rani of Jhansi—who died at the head of her troops—and Tantia Topi.

Transfer to the Crown.

With the end of the mutiny there began a new era in India, strikingly marked at the outset by the Act for the Better Government of India (1858) which transferred the entire administration from the Company to the Crown. By that Act India was to be governed by, and in the name of, the Sovereign through a Secretary of State, assisted by a Council of fifteen members. At the same time the Governor-General received the title of Viceroy. The European troops of the Company, numbering about 24,000 officers and men were—greatly resenting the transfer—amalgamated with the Royal service, and the Indian Navy was abolished. On November 1, 1858, the Viceroy announced in Durbar at Allahabad that Queen Victoria had assumed the Government of India, and proclaimed a policy of justice and religious toleration. A principle already enunciated in the Charter Act of 1833 was reinforced, and all of every race or creed, were to be admitted as far as possible to those offices in the Queen's service for which they might be qualified. The aim of the Government was to be the benefit of all her subjects in India—"In their prosperity will be our strength, in their contentment our security, and in their gratitude our best reward." Peace was proclaimed in July 1859, and in the cold weather Lord Canning went on tour in the northern provinces, to receive the homage of loyal chiefs and to assure them that the "policy of lapse" was at an end. A number of other important reforms marked the closing years of Canning's Viceroyalty. The India Councils Act (1861) augmented the Governor-General's Council, and the Councils of Madras and Bombay by adding non-official members, European and Indian, for legislative purposes only. By another Act of the same year, High Courts of Judicature were constituted. To deal with the increased debt of India Mr. James Wilson was sent from England to be Financial Member of Council, and to him are due the customs system, income tax, license duty, and State paper currency. The cares of office had broken down the Viceroy's health. His successor, Lord Elgin, lived only a few months after his arrival in India, and was succeeded by Sir John (afterwards Lord) Lawrence, the "saviour of the Punjab."

Sir John Lawrence.

The chief task that fell to Sir John Lawrence was that of reorganising the Indian military system, and of reconstructing the Indian army. The latter task was carried out on the principle that in the Bengal army the proportion of Europeans to Indians in the infantry and cavalry should be one to two, and in the Madras and Bombay armies one to three: the artillery was to be almost wholly European. The re-organisation was carried out in spite of financial difficulties and the saddling of Indian revenues with the cost of a war in Abyssinia with which India had no direct concern; but operations in Bhutan were all the drain made on the army in India while the re-organising process was being carried on. Two severe famines—in Orissa (1866) and Bundelkhand and Upper Hindustan (1868-9)—occurred, while Sir John Lawrence was Viceroy, and he laid down the principle for the first time in Indian history, that the officers of the Government would be held personally responsible for taking every possible means to avert death by starvation. He also created the Irrigation Department under Col. (Sir Richard) Strachey. Two commercial crises of the time have to be noted. One seriously threatened the tea industry in Bengal. The other was the consequence of the wild gambling in shares of every description that took place in Bombay during the years of prosperity for the Indian cotton industry caused by the American Civil War. The "Share Mania," however, did no permanent harm to the trade of Bombay, but was, on the other hand, largely responsible for the series of splendid buildings begun in that city during the Governorship of Sir Bartle Frere. Sir John Lawrence retired in 1869, having passed through every grade of the service, from an Assistant Magistracy to the Viceroyalty. Lord Mayo, who succeeded him, created an Agricultural Department and introduced the system of Provincial Finance, thus fostering the impulse to local self-government. He also laid the foundation for the reform of the salt duties, thereby enabling his successors to abolish the inter-provincial customs lines. Unhappily his vast schemes for the development of the country by extending communications of every kind were not carried out to the full by him, for he was murdered in the convict settlement of the Andaman Islands, in 1872 Lord Northbrook (Viceroy 1872-6) had to exercise his abilities chiefly in the province of finance. A severe famine which threatened Lower Bengal in 1874 was successfully warded off by the organization of State relief and the importation of rice from Burma. The following year was notable for the deposition of the Gaikwar of Baroda for mis-government, and for the tour through India of the Prince of Wales (the late King Edward VII). The visit of the Duke of Edinburgh to India when Lord Mayo was Viceroy had given great pleasure to those with whom he had come in touch, and had established a kind of personal link between India and the Crown. The Prince of Wales' tour aroused unprecedented enthusiasm for and loyalty to the British Raj, and further encouragement was given to the growth of this spirit when, in a durbar of great magnificence held on January 1st, 1877, on the famous Ridge at Delhi, Queen Victoria was proclaimed Empress of India. The Viceroy of that time, Lord Lytton, had, however, to deal with a situation of unusual difficulty. Two successive years of drought produced, in 1877-78, the worst famine India had known. The most strenuous exertions were made to mitigate its effects, and eight crores of rupees were spent in importing grain; but the loss of life was estimated at 5¼ millions. At this time also Afghan affairs once more became prominent.

Second Afghan War.

The Amir, Sher Ali, was found to be intriguing with Russia and that fact, coupled with his repulse of a British mission led to the second Afghan War. The British forces advanced by three routes—the Khyber, the Kurram, and the Bolan—and gained all the important vantage points of Eastern Afghanistan. Sher Ali fled and a treaty was made with his son Yakub Khan, which was promptly broken by the murder of Sir Louis Cavagnari, who had been sent as English envoy to Kabul. Further operations were thus necessary, and Sir F. (now Lord) Roberts advanced on the capital and defeated the Afghans at Charasia. A rising of the tribes followed, in spite of Sir D. Stewart's victory at Ahmed Kheyl and his advance from Kabul to Kandahar. A pretender, Sirdar Ayub Khan, from Herat prevented the establishment of peace, defeated Gen. Burrows' brigade at Maiwand, and invested Kandahar. He was routed in turn by Sir F. Roberts who made a brilliant march from Kabul to Kandahar. After the British withdrawal fighting continued between Ayub Khan and Abdur Rahman, but the latter was left undisputed Amir of Afghanistan until his death in 1901.

In the meantime Lord Lytton had resigned (1880) and Lord Ripon was appointed Viceroy by the new Liberal Government. Lord Ripon's administration is memorable for the freedom given to the Press by the repeal of the Vernacular Press Act, for his scheme of local self-government which developed municipal institutions, and for the attempt to extend the jurisdiction of the criminal courts in the Districts over European British subjects, independently of the race or nationality of the presiding judge. This attempt, which created a feeling among Europeans in India of great hostility to the Viceroy, ended in a compromise in 1884. Other reforms were the re-establishment of the Department of Revenue and Agriculture, the appointment of an Education Commission with a view to the spread of popular instruction on a broader basis, and the abolition by the Finance Minister (Sir Evelyn Baring, now Lord Cromer) of a number of customs duties. Lord Dufferin, who succeeded Lord Ripon in 1884, had to give his attention more to external than internal affairs: one of his first acts was to hold a durbar at Rawalpindi for the reception of the Amir of Afghanistan which resulted in the strengthening of British relations with that ruler. In 1885 a third Burmese war became necessary owing to the truculent attitude of King Thibaw and his intrigues with foreign Powers. The expedition, under General Prendergast, occupied Mandalay without difficulty and King Thibaw was exiled to Ratnagiri, where he died on 16th December 1916. His dominions of Upper Burma were annexed to British India on the 1st of January, 1886.

The Russian Menace.

Of greater importance at the time were the measures taken to meet a possible, and as it then appeared a probable, attack on India by Russia. These preparations, which cost over two million sterling, were hurried on because of a collision which occurred between Russian and Afghan troops at Penjdeh; during the delimitation of the Afghan frontier towards Central Asia, and which seemed likely to lead to a declaration of war by Great Britain. War was averted, but the Penjdeh incident had called attention to a menace that was to be felt for nearly a generation more; it had also served to elicit from the Princes of India an unanimous offer of troops and money in case of need. That offer bore fruit under the next Viceroy, Lord Lansdowne, when the present system of Imperial Service Troops was organised. Under Lord Lansdowne's rule also the defences of the North-Western Frontier were strengthened, on the advice of Sir Frederick (now Earl) Roberts, who was then Commander-in-Chief in India. Another form of precautionary measure against the continued aggression of Russia was taken by raising the annual subsidy paid by the Indian Government to the Amir from eight to twelve lakhs.

On the North-Eastern Frontier there occurred (1891) in the small State of Manipur a revolution against the Raja that necessitated an inquiry on the spot by Mr. Quinton the Chief Commissioner of Assam. Mr. Quinton, the commander of his escort, and others, were treacherously murdered in a conference and the escort ignominiously retreated. This disgrace to British arms led to several attacks on frontier outposts which were brilliantly defeated. Manipur was occupied by British troops and the government of the State was reorganised under a Political Agent. Lord Lansdowne's term of office was distinguished by several other events, such as the passing of the Parliamentary Act (Lord Cross's Act, 1892), which increased the size of the Legislative Councils as well as the number of non-officials in them: legislation aimed at social and domestic reform among the Hindus: and the closing of the Indian Mints to the free coinage of silver (1893).

Frontier Campaigns.

Lord Elgin, who succeeded Lord Lansdowne in 1894, was confronted at the outset with a deficit of Rs. 2¼ crores, due to the fall in exchange. (In 1895 the rupee fell as low as 1*s.* 1*d.*) To meet this the old five per cent. import duties were reimposed on a number of commodities, but not on cotton goods: and within the year the duty was extended to piece-goods, but not to yarn. The reorganisation of the Army, which involved the abolition of the old system of Presidency Armies, had hardly been carried out when a number of risings occurred along the North-West Frontier. In 1895 the British Agent in Chitral—which had come under British influence two years previously when Sir H. M. Durand had demarcated the southern and eastern boundaries of Afghanistan—was besieged and had to be rescued by an expeditionary force. Two years later the Wazirs, Swatis, and Mohmands attacked the British positions in Malakand, and the Afridis closed the Khyber Pass. Peace was only established after a prolonged campaign (the Tirah campaign) in which 40,000 troops were employed, and over 1,000 officers and men had been lost. This was in itself a heavy burden on the finances of India, which was increased by the serious and widespared

famine of 1896-97 and by the appearance in India of bubonic plague. The methods taken to prevent the spread of that disease led, in Bombay, to rioting, and elsewhere to the appearance in the vernacular press of seditious articles which made it necessary to make more stringent the law dealing with such writings.

Lord Curzon's Viceroyalty.

With famine and plague Lord Curzon also, who succeeded Lord Elgin in 1899, had to deal. In 1901 the cycle of bad harvests came to an end; but plague increased, and in 1904 deaths from it were returned at over one million. Of the many problems to which Lord Curzon directed his attention, only a few can be mentioned here: some indeed claim that his greatest work in India was not to be found in any one department but was in fact the general gearing up of the administration which he achieved by his unceasing energy and personal example of strenuous work. He had at once to turn his attention to the North-West Frontier. The British garrisons beyond our boundary were gradually withdrawn and replaced by tribal levies, and British forces were concentrated in British territory behind them as a support. An attempt was made to check the arms traffic and work on strategic railways was pushed forward. The fact that in seven years he only spent a quarter of a million upon repressive measures and only found it necessary to institute one blockade (against the Mahsud Waziris) is the justification of this policy of compromise between the Lawrence and Forward schools of thought. In 1901 the trans-Indus districts of the Punjab were separated from that Province, and together with the political charges of the Malakand, the Khyber, Kurram, Tochi, and Wana were formed into the new North-West Frontier Province, under a Chief Commissioner directly responsible to the Government of India. That year also witnessed the death of Abdur Rahman, the Amir of Afghanistan, and the establishment of an understanding with his successor Habibullah. In 1904 the attitude of the Dalai Lama of Tibet being pro-Russian and anti-British, it became necessary to send an expedition to Lhasa under Colonel (Sir Francis) Younghusband. The Dalai Lama abdicated and a treaty was concluded with his successor.

In his first year of office Lord Curzon passed the Act which, in accordance with the recommendations of the Fowler Commission, practically fixed the value of the rupee at 1*s*. 4*d*., and in 1900 a Gold Reserve fund was created. The educational reforms that marked this Viceroyalty are dealt with elsewhere: chief among them was the Act of 1904 reorganising the governing bodies of Indian Universities. Under the head of agrarian reform must be mentioned the Punjab Land Alienation Act, designed to free the cultivators of the soil from the clutches of money-lenders, and the institution of Agricultural banks. The efficiency of the Army was increased (Lord Kitchener was Commander-in-Chief) by the re-armament of the Indian Army, the strengthening of the artillery, and the reorganisation of the transport service. In his relations with the Feudatory Chiefs, Lord Curzon emphasized their position as partners in administration, and he founded the Imperial Cadet Corps to give a military education to the sons of ruling and aristocratic families. In 1902 the British Government obtained from the Nizam a perpetual lease of the Assigned Districts of Berar in return for an annual payment of 25 lakhs. The accession of King Edward VII was proclaimed in a splendid Durbar on January 1, 1903. In 1904 Lord Curzon returned to England for a few months but was re-appointed to a second term of office, Lord Ampthill, Governor of Madras, having acted as Viceroy during his absence. The chief act of this second term was the partition of Bengal and the creation of a new Province of Eastern Bengal and Assam—a reform, designed to remove the systematic neglect of the trans-Gangetic areas of Bengal, which evoked bitter and prolonged criticism. In 1905 Lord Curzon resigned, being unable to accept the proposals of Lord Kitchener for the re-adjustment of relations between the Army headquarters and the Military Department of the Government, and being unable to obtain the support of the Home Government. Lord Curzon was succeeded by **Lord Minto,** the grandson of a former Governor-General. It was a stormy heritage to which Lord Minto succeeded, for the unrest which had long been noticed developed in one direction into open sedition.

Outside Bengal attempts to quell the disaffection by the ordinary law were fairly successful. But scarcely any province was free from disorder of some kind and, though recourse was had to the deportation of persons without reason assigned under an Act of 1818, special Acts had to be passed to meet the situation, *viz*:—an Explosives Act, a Prevention of Seditious Meetings Act, and a Criminal Law Amendment Act which provides for a magisterial inquiry in private and a trial before three judges of the High Court without a jury. Concurrently with these legislative measures steps were taken to extend representative institutions. In 1907 a Hindu and a Mahomedan were appointed to the Secretary of State's Council, and in 1909 a Hindu was appointed for the first time to the Viceroy's Council. The Indian Councils Act of 1909 carried this policy farther by reconstituting the legislative councils and conferring upon them wider powers of discussion. The executive councils of Madras and Bombay were enlarged by the addition of an Indian member.

As regards foreign policy, Lord Minto's Viceroyalty was distinguished by the conclusion (1907) between Great Britain and Russia of an agreement on questions likely to disturb the friendly relations of the two countries in Asia generally, and in Persia, Afghanistan and Tibet in particular. Two expeditions had to be undertaken on the North-West frontier, against the Zakka Khels and the Mohmands; and ships of the East Indies Squadron were frequently engaged off Maskat and in the Persian Gulf in operations designed to check the traffic in arms through Persia and Mekran to the frontier of India.

Visit of the King and Queen.

Sir Charles (Lord) Hardinge was appointed to succeed Lord Minto in 1910. His first year in India was marked by the visit to India of the

King Emperor and the Queen, who arrived at Bombay on December 2, 1911. From there they proceeded to Delhi where, in the most magnificent durbar ever held in India, the coronation was proclaimed and various boons, including an annual grant of 50 lakhs for popular education, were announced. At the same ceremony His Majesty announced the transfer of the capital of India from Calcutta to Delhi: the reunion of the two Bengals under a Governor-in-Council: the formation of a new Lieutenant-Governorship for Behar, Chota Nagpur and Orissa and the restoration of Assam to the charge of a Chief Commissioner.

In August, 1913, the demolition of a lavatory attached to a mosque in Cawnpore was made the occasion of an agitation among Indian Mahomedans and a riot in Cawnpore led to heavy loss of life. Of those present at the riot, 106 were put on trial but subsequently released by the Viceroy before the case reached the Sessions, and His Excellency was able to settle the mosque difficulty by a compromise that was acceptable to the local and other Mahomedans.

Still more serious trouble occurred in September, 1914, when a riot at Budge-Budge among a number of Sikh emigrants returned from Canada gave a foretaste of the revolutionary plans entertained by those men. The sequel, revealed in two conspiracy trials at Lahore, showed that the "Ghadr" conspiracy was widespread and had been consistently encouraged by Germany.

Lord Chelmsford as Viceroy.

In 1916 Lord Chimsford succeeded Lord Hardinge, as Viceroy. The part played by India in the war was developed in every possible way. Not only was the Indian Army increased but the resources of the country were developed with the help of the Munitions Board and India assumed responsibility for 100 millions of the war debt. The share of India in the Imperial burden of the war was emphasised in another and very significant way by her representation in the Imperial War Cabinet in London by His Highness the Maharaja of Bikaner and Sir S. P. (Lord) Sinha. On the Frontier, where there had been numerous though comparatively slight disturbances in 1914-15, a punitive expedition had to be undertaken against the Mahsuds.

In 1917 **Mr. Montagu**, who had succeeded Mr. Chamberlain as Secretary of State, carried out the latter's intention of visiting India. The result of the visit was shown in the following year when a report was issued containing what is known as the joint scheme of reform evolved by the Secretary of State and the Viceroy. Shortly after this report there was issued a report by the Special Committee of Inquiry over which Mr. Justice Rowlatt presided, into seditious crime in India. That report and the legislation which followed in consequence of it, together with the announcement of the proposed reform scheme, led to a renewal of political discussion and agitation which had to a great extent been in abeyance during the early years of the war.

Early in 1919 prolonged strikes in Bombay and elsewhere showed that India, though comparatively little affected by the economic results of the war, was confronted by industrial and economic problems which were none the less grave. The gravity of those problems was increased by the ravages of influenza which is supposed to have caused 6,000,000 deaths during the winter months of 1917-18. Disturbances broke out in April as a sequel to the passive resistance movement against the Rowlatt Act (the Satyagraha Movement) which produced a situation to which there has been no parallel since the Mutiny. It is sufficient here to state that in Ahmedabad, Viramgam, Delhi, Lahore, Amritsar, Gujranwalla and other places the crowd, by attacking life and property and by train wrecking and tearing up railway lines and telegraph wires, provoked a situation which could only be met by the proclamation of martial law and the enforcement of military measures for the protection of law abiding subjects and for the suppression of disorder.

Exaggerated reports of those riots and of the effect of the Rowlatt Act may be presumed to have had some influence on the Amir of Afghanistan when he declared war and invaded British territory. Amir Habibullah Khan, who had been loyal to his treaty obligations throughout the war, was murdered in February and, after a brief occupation of the throne by his brother Nasrulla Khan, his son Amanulla had been declared Amir. A sequel to this war was the renewal of trouble along a great part of the North Western frontier where the tribesmen, who had at first appeared to be impressed by the British successes, took the offensive against our advance posts especially in southern Waziristan. The operations which necessarily followed and the severity of the fighting were on a scale never previously reached in frontier war, and made the campaign of unusual length

The Government of India Bill, embodying Mr. Montagu's proposals for the popularisation of the system of Government, was passed in December.

The next year, 1920, more than any which preceded it, was distinguished by political agitation. The cause of this was in part the indignation created by the facts disclosed in the report of the Hunter Commission on the outbreaks of 1919 in the Punjab and elsewhere, and the stimulus given to the Khilafat agitation by the terms of the Peace treaty with Turkey.

Lord Reading's Viceroyalty.

The fruits of agitation were reaped in plenty in 1921, the first year of Lord Reading's term of office. Murderous outbreaks at Malegaon, Dharwar and elsewhere were followed by a rebellion of the Moplahs in Malabar which assumed the most serious proportions and necessitated prolonged military operations.

It had been arranged that H. R. H. the Prince of Wales should visit India at the end of 1920 and should open the new Councils in 1921, but, for reasons of health, that visit had to be postponed; and H. R. H. the Duke of Connaught came to India early in 1921 in order to open the new Councils. The Prince's visit took place in 1921-22 and was essentially non-political.

The enthusiasm with which the Prince was greeted during his tour was very marked. But simultaneously with the loyal display riots broke out in more than one of the cities which he visited. But after the imprisonment of some of the leading agitators in the early part of 1922 the country enjoyed comparative quiet, except in the Punjab where the Akali movement among the Sikhs, which had started as a puritan religious movement, developed into a political movement attended by constant and widespread disorder. The enhanced position of India in the Empire and the position of India as a nation entering actively into the work of the League of Nations, were emphasised during the year by the tour of the Dominions undertaken by the Hon. S. Sastri.

The Salt Tax.

Early in 1923 a great deal of criticism was excited by Lord Reading's certification of the doubling of the salt tax, under the powers conferred by the Reformed constitution, in opposition to the clearly expressed will of the Legislative Assembly. Objection was taken to this step, not so much because an increase in the Salt Tax had always been looked upon as a measure to which resort should be made only in grave emergencies, as because the financial powers of the elected chambers, much emphasised in the Montagu-Chelmsford Report, were thus shown to be capable of restriction.

Break up of non-co-operation.

Two causes combined during the year to weaken the position of the extremists. The first was the split in the Congress, the second the rise of communal feeling between Hindus and Mahomedans. The Congress split was brought about by Mr. C. R. Das, who, realising no doubt that Mr. Gandhi had failed and it was unlikely that any other man would have greater success by a rigid adherence to his methods, declared in favour of standing for the Councils.

The other cause was the disappearance of the surface unity between Hindus and Mahomedans which Mr. Gandhi, helped by strong feeling among Mahomedans on the Turkish question, had temporarily contrived. The split was followed by the formation of two pan-Hindu movements: the Shuddhi movement, announced by Swami Shraddhanand, which aimed at the re-conversion to Hinduism of the Malkhana Rajputs and other low class occupants of the fringe of Islam, and the Sangathan movement of which Pandit Malaviya was the sponsor, and which aimed at teaching Hindus physical exercises and sword play, so that they might be the better able to protect themselves. These two movements greatly irritated the Mahomedans, and during the year there were between fifteen and twenty serious Hindu-Mahomedan riots, occurring in all parts of India.

Violent Movements.

In the Punjab the Akali movement showed an increasing tendency to forget the teachings of Mr. Gandhi. The Babar Akalis murdered several of their co-religionists whose political views they did not approve, and the Akali Dal became a more definitely military organisation, acting directly under the orders of the Shrines Committee. After a career of misgovernment and intrigue against the neighbouring state of Patiala, the Maharaja of Nabha voluntarily abdicated. Somewhat ludicrously the Akalis turned him into a martyr, and the movement became sufficiently formidable for both the Akali Dal and the Shrines Committee to be declared illegal associations. Many arrests were made; but, owing to the lack of unity in the extremist camp, an attempt of the Congress to secure all India support for the Akalis had a meagre result.

During the year there were an unusual number of frontier outrages. Several officers were shot, and worldwide attention was attracted by the kidnapping of Molly Ellis, after the murder of her mother, and by her heroic rescue by Mrs. Starr. Coupled with the slow rate of progress of the operations in Waziristan, these continued incidents provoked some comment.

Mr. Gandhi's Release.

Mr. Gandhi's premature release from Yerowda jail in consequence of an operation for appendicitis temporarily revived the drooping hopes of the extremists, but any idea that he would organize another huge anti-Government movement was rapidly shattered. The breach between him and Mr. Das steadily widened and the belief of Hindu politicians in Mr. Gandhi's common sense diminished though their esteem for his character remained as high as ever. Moreover the feeling between Hindus and Mahomedans which had suddenly appeared the previous year darkened the whole face of the country. With the abolition of the Khilafat by Mustapha Kemal in March the *raison d'etre* of the famous pact between Mr. Gandhi and the Alis was destroyed and animosity no longer felt the restraint of political expediency. Rumours were frequent that some mysterious All-India Mahomedan clique was planning aggressive action against Hindus; and excitement was brought to fever heat by the riots in the Frontier Province, the Punjab, the United Provinces, Delhi, Calcutta, the Central Provinces and Hyderabad which broke out during the autumn season of religious festivals. In September Mr. Gandhi decided on a 21 days' fast, which he successfully accomplished, partly as an expiation for his share in the bad feeling, and partly to draw the attention of the country to the urgency of the problem. Simultaneously a conference of representatives of all communities, including the Metropolitan and other English visitors was called at Delhi to decide what steps could be taken to bring about a better state of affairs. The conference passed some excellent resolutions, but on the very day when Mr. Gandhi's fast ended riots again broke out, and what gave the matter a grave aspect was that the date of the riots had been predicted and it was commonly said that they had been carefully planned for that very day.

Reforms Imperilled.

The year saw the final collapse of non-co-operation. Though Mr. Gandhi and a dwindling band of followers clung to *khaddar* and the triple boycott, lawyers returned to their practices, schoolboys and students finally despaired of national education, and the best

brains of non-co-operation followed Mr. Das into the Councils. The programme announced by Mr. Das was to wreck the Reforms, and in this ambition he was reasonably near success. Obstructive tactics effected the resignation of the Ministers in the Central Provinces and Bengal and left these two provinces to be administered by Governors without democratic help, but in other parts of India the Councils did well in the circumstances.

Underground the revolutionary movement continued. A series of assassinations took place in Bengal, and Mr. Das incurred bitter criticism by associating himself with a tribute to the murderer of an inoffensive Englishman in Calcutta.

The third attempt to climb Everest came very near to success. A height 600 feet from the top was reached, but in an effort to accomplish the last stretch Mallory and Irvine were killed. It was not established whether they had or had not reached the top.

India in 1925 and 1926.

In 1925 the extremists received a sad blow by the death of Mr. C. R. Das, leader of the Swarajist Party. His death took the Party completely aback, and the counsel of Mr. Gandhi had to be sought in order to deal with this disastrous situation. Mr. Gandhi sent an invitation to Arabindo Ghose, a Bengali *litterateur* and reputed thaumaturge who since the assassinations of 1908 and 1909 has been living on French territory at Pondicherry, to take command of the Swarajist band. Mr. Ghose declined with thanks, and the lot thereupon fell upon Mr. Sen Gupta, a Bengali politician of whom for the rest of the year little was heard outside Bengal. From this point the falling away of Swarajists from the old austere principle of ruthless and irreconcilable obstruction proceeded apace. First Mr. Tambe, a Swarajist in the Central Provinces, accepted an Executive Councillorship from the alien Government, next Mr. Patel, a Bombay Swarajist, took the Presidential chair in the Assembly and expressed his readiness if necessary to meet the Viceroy nine times a day, and then others in Bombay and the Central Provinces adopted the policy of "responsive co-operation"—a phrase denoting a critical attitude towards Government coupled with readiness in certain circumstances to receive a lucrative post from Government. The political sky, in fact, brightened considerably.

Indian political history during 1926, the year in which Lord Irwin became Viceroy, was a record of continuous improvement in the outlook. The Swarajists in the Indian Legislative Assembly proved to be of less account than in any session since their first entry into that body in January 1924. Their prestige similarly diminished in the Provincial Legislative Councils, where they had hitherto enjoyed dominating power. The proximity of the General Elections to all the legislatures in the autumn of the year filled them with the desire of some dramatic effort to catch the imagination of the constituencies and they consequently organised spectacular "walks-out" from the legislatures. The first took place in the Legislative Assembly. Every effort short of physical coercion was employed by the extremists to persuade or compel the President, the Hon. Mr. V. J. Patel, formerly Deputy Leader of the Swarajist party in the House, to accompany the move by quitting the chair. Had he done so, there would have been an awkward constitutional crisis. But Mr. Patel refused and the demonstration fell flat. The same may be said of corresponding efforts in the Provincial Councils.

But tension between the Hindu and Moslem communities, resulted in grave riots in Calcutta and in similar disturbances, less only in magnitude, in numerous smaller centres in Upper India. This increase of communal trouble was directly associated with the propaganda carried on by leaders of political opinion in preparation for and in connection with the General Elections. The elections themselves were marked by no riotous outbreak of importance, but they were fought on communal lines, not only as between Hindus and Moslems but as between Brahmins and non-Brahmins, and on lines of local personal and sectional rivalries, rather than on the broad lines of public policy.

An important development during the year was the presentation in August by the Royal Commission on Currency and Exchange of a report recommending that the functions hitherto exercised by Government in connection with these matters should in future be carried out by the newly instituted Indian Reserve Bank, that the Gold Standard Reserve and the Paper Currency Reserve should be amalgamated for the purpose and that there should be instituted a new Gold Bullion Standard, with the rupee exchange ratio fixed at 1*s.* 6*d.* gold. The Government of India, at the autumn session of their legislature, immediately after the issue of the report, announced their acceptance of the Commission's recommendation with regard to the exchange ratio and introduced a bill to give effect to it.

It was in this year that the Royal Commission on Indian Agriculture, under the chairmanship of Lord Linlithgow, was appointed and made its first visit to India.

Events in 1927.

Tension between the Hindu and Mahomedan communities continued during 1927 and was marked by several outbreaks of violence which drew from H. E. the Viceroy more than one weighty pronouncement and an offer to preside at a conference on the subject if the leaders of the two communities thought that any good purpose could thereby be served. More than one vain attempt was made, as in previous years to arrive at an agreement between the two communities, particularly on the most vexed questions of cow-killing and music before mosques. Towards the end of the year the announcement was made in Parliament of a purely Parliamentary Commission, under the chairmanship of Sir John Simon, to inquire into the Government of the country, and this aroused a storm of indignant protest throughout the country. The Liberals joined in the protest mainly because no Indians were included in the personnel of the Commission; the National Congress, which passed a resolution in favour of complete national independence, protested mainly on the ground that Parliament had no right to determine what should be the future form of government in India; and both these parties joined in proclaiming a boycott of the

Commission. The Mahomedans were divided on the question, but the majority of them were opposed to the boycott policy.

Apart from politics and long discussions involved by the Reserve Bank Bill, the year was memorable as one of disaster. Great floods occurred in Sind, Kathiawar, Gujarat and Orissa; a cyclone swept over Nellore; and a devastating fire took place in Peshawar—all making great demands on the resources of Government and the generosity of the public.

The visit of His Majesty the King of Afghanistan to Karachi and Bombay, on his way to Europe, was made the occasion for a very remarkable outburst of popular enthusiasm. His Majesty, who was accompanied by the Queen, stayed some days in Bombay and his replies to many addresses and his sermon in a mosque, advocating religious tolerance, created a great sensation.

Events of 1928.

When the year opened, the proposed boycott of the Simon Commission was the chief subject of discussion: when it ended the chief subject was the proposed acceptance of the Nehru Report. The faulty machinery of boycott, the tact of Sir John Simon, the eventual desire to prepare a constitution rather than fritter away energy upon a discredited policy were all responsible for the change. The Nehru Report was an answer to a challenge by Lord Birkenhead, and both the All-Parties Conference and the National Congress decided that neither Parliament nor the Simon Commission should doubt any longer what the "minimum" demands of progressive Indian opinion were to be.

The Donoughmore Report on Reforms in Ceylon has an indirect importance for India: the Linlithgow Report on Indian Agriculture is a document which has not yet received the attention it deserves. But more controversial has been the progress of the Butler Committee enquiring into the relations between the paramount power and the Indian States. Alarmed by possible developments in British India, the Indian Princes appointed Sir Leslie Scott to be their counsel, paying him probably the highest legal fee on record. Sir Leslie was the author of a controversial proposal for a scheme of federation between British India and the Princes. The support and publicity which the Princes received in London encouraged the subject of various Indian States to present a case of their own.

Politically, there have been many dangers. The peasants of Bardoli, refusing to pay the land tax on a new assessment and, at the instigation of some prominent political leaders, defying constituted authority, at least received an ultimatum from the Government, which compelled them to make a timely surrender. The Government of India had to sacrifice several valuable Bills in the Legislative Assembly.

Communal disturbances were numerous, while the publication of the Nehru Report led to unconditional opposition from the followers of Mr. Shaukat Ali. But almost worse than communalism has been the industrial disaffection which paralysed trade in Calcutta and Bombay and in Bombay led to a prolonged strike in the cotton industry, and to the ugly riots which marked the end of the year. The end of the year saw an intensive rebellion in Afghanistan, following several months after the King's return from his grand tour. The abdication of King Amanullah was followed by a period of chaos.

The Government of India.

The impulse which drove the British to India was not conquest but trade. The Government of India represents the slow evolution from conditions established to meet trading requirements. On September 24, 1599, a few years before the deaths of Queen Elizabeth and Akbar, the merchants of London formed an association for the purpose of establishing direct trade with the East and were granted a charter of incorporation. The Government of this Company in England was vested in a Governor with a General Court of Proprietors and a Court of Directors. The factories and affairs of the Company on the East and West Coast of India, and in Bengal, were administered at each of the principal settlements of Madras (Fort St. George), Bombay and Calcutta (Fort William), by a President or Governor and a Council consisting of the senior servants of the Company. The three "Presidencies" were independent of each other and subordinate only to the Directors in England.

Territorial Responsibility Assumed.

The collapse of government in India consequent on the decay of Moghul power and the intrigues of the French on the East Coast forced the officers of the Company to assume territorial responsibility in spite of their own desires and the insistent orders of the Directors. Step by step the Company became first the dominant, then the paramount power in India. In these changed circumstances the system of government by mutually independent and unwieldy councils of the merchants at the Presidency towns gave rise to grave abuses. Parliament intervened, and under the Regulating Act of 1773, a Governor-General and four councillors were appointed to administer the Presidency of Fort William (Bengal); and the supremacy of that Presidency over Madras and Bombay was for the first time established. The subordinate Presidencies were forbidden to wage war or make treaties without the previous consent of the Governor-General of Bengal in Council, except in cases of imminent necessity. Pitt's Act of 1784, which established the Board of Control in England, vested the administration of each of the three Presidencies in a Governor and three councillors, including the Commander-in-Chief of the Presidency Army. The control of the Governor-General-in-Council was somewhat extended, as it was again by the Charter Act of 1793. Under the Charter Act of 1833 the Company was compelled to close its commercial business

and it became a political and administrative body holding its territories in trust for the Crown. The same Act vested the direction of the entire civil and military administration and sole power of legislation in the Governor-General-in-Council, and defined more clearly the nature and extent of the control to be extended over the subordinate governments. After the Mutiny, there was passed, in 1858, an Act transferring the Government of India from the Company to the Crown. This Act made no important change in the administration in India, but the Governor-General, as representing the Crown, became known as the Viceroy. The Governor-General is the sole representative of the Crown in India; he is assisted by a Council, composed of high officials, each of whom is responsible for a special department of the administration.

Functions of Government.

The functions of the Government in India are perhaps the most extensive of any great administration in the world. It claims a share in the produce of the land and in the Punjab and Bombay it has restricted the alienation of land from agriculturists to non-agriculturists. It undertakes the management of landed estates where the proprietor is disqualified. In times of famine it undertakes relief work and other remedial measures on a great scale. It manages a vast forest property and is the principal manufacturer of salt and opium. It owns the bulk of the railways of the country, and directly manages a considerable portion of them; it has constructed and maintains most of the important irrigation works; it owns and manages the post and telegraph systems; it has the monopoly of the Note issue, and it alone can set the mints in motion. It lends money to municipalities, rural boards, and agriculturists and occasionally to owners of historic estates. It controls the sale of liquor and intoxicating drugs and has direct responsibilities in respect to police, education, medical and sanitary operations and ordinary public works of the most intimate character. The Government has also close relations with the Indian States which collectively cover more than one-third of the whole area of India and comprise more than one-fifth of its population. The distribution of these great functions between the Government of India and the provincial administrations has fluctuated and was definitely regulated by the Reform Act of 1919.

THE REFORMS OF 1919.

Great changes were made in the system of government in British India by the Government of India Act, 1919, which, together with the rules framed under it—almost as important in their provisions as the Act itself—came into general operation in January 1921. The Act was the outcome of an inquiry conducted in India in the winter of 1917-18 by the Secretary of State (Mr. Montagu) and the Viceroy (Lord Chelmsford), the results of which were embodied in their Report on Indian Constitutional Reform issued in the spring of 1918. The recommendations in this report were supplemented by those of two Committees which toured in India in the winter of 1918-19, and which issued their Reports in the spring of 1919. A third Committee was appointed during the latter year to make recommendations for the modification of the system of administration of Indian affairs in the United Kingdom, and issued their Report while the Government of India Bill was under examination by a Joint Select Committee of both Houses of Parliament. The Joint Select Committee in their turn issued an exhaustive Report on the Bill, which was passed in a form practically identical with that recommended by the Joint Committee, and received the Royal Assent on the 23rd December 1919.

The Divisions.—British India for administrative purposes is divided into 15 provinces, each with its separate Local Government or administration. In nine of the provinces—the three Presidencies of Madras, Bombay and Bengal, the United Provinces of Agra and Oudh, the Punjab, Bihar and Orissa, the Central Provinces, Burma, and Assam—the Local Government consists of a Governor, an Executive Council of not more than four members, and two or more Ministers. In 1922 Burma, which was excluded from the original scheme, was brought into line with it. An Act of Parliament was passed, constituting Burma a Governor's Province, with a Governor, an Executive Council and Ministers and a Legislative Council elected on a very democratic franchise, which gave the vote to women. The remaining six provinces are directly administered by Chief Commissioners, who are technically mere agents of the Central Government of India. No change has been made by the Act of 1919 in the system of administration in these six minor provinces.

Dyarchy.—In these nine provinces the executive Government is a dual organism which owes its unity to the Governor. One half of the organism consists of the Governor and his executive Council, all of whom are appointed by the King. This body is responsible for the administration of those subjects which are "reserved." The other half of the executive organism is the Governor acting with the advice of Ministers who are appointed by him, hold office during his pleasure, and must be elected members of the Provincial Legislative Council. To the Governor acting with Ministers is entrusted the administration of "transferred" subjects.

The Object.—The framers of the Act of 1919 had a twofold object in view. Their primary object was to devise a plan which would render possible the introduction by successive stages of a system of responsible government in British India in modification

of the previous system under which the Governments in India both central and provincial, received their mandates from the British Parliament acting through the Secretary of State for India, the Cabinet Minister responsible to Parliament for the administration of Indian affairs.

The Provinces.—Starting from the premise that it was in the provinces that the first substantial steps must be taken towards the development of a system of responsible government, the framers of the Act of 1919 provided for a statutory demarcation of the functions to be exercised by the Government of India and the Provincial Governments respectively in their administrative capacity. No attempt was made in this connection to limit the field open to the Indian Legislature, which still retains a concurrent (though not an overriding) power of legislation for the affairs of the provinces in general and of individual provinces; but the rules under the Act provide specifically for the exercise of this right in certain specified provincial matters, and the theory upon which the Act proceeds assumes that a convention will be established and rigorously observed which will confine intervention by the Indian Legislature in provincial affairs to matters so specified.

Finance.—The "revenues of India"—or, rather, their sources—are definitely divided between the Central and Provincial Governments; the Provincial Governments have now almost complete control over the administration of their "allocated" revenues, they have power to supplement them by raising loans on the security of these revenues, and their right, subject in certain cases to the Governor-General's sanction, to initiate new taxation measures is formally recognised.

It was found impossible to devise any scheme of allocation of revenues between the Central and Provincial Governments which did not leave the former with a deficit. This deficit is to be met in part by an annual contribution from seven of the eight Governors' provinces, the province of Bihar and Orissa, owing to the comparative exiguousness and inelasticity of its own revenues, having been exempted from this contribution. The aggregate sum thus due from the provinces to the Government of India at the outset is Rs. 983 lakhs, of which Madras contributes Rs. 348 lakhs, the United Provinces Rs. 240 lakhs, the Punjab Rs. 175 lakhs, and the other four provinces sums ranging from Rs. 15 lakhs to Rs. 64 lakhs. The annual contribution is in no case to be subject to increase in the future, and if reduction of the aggregate is found possible by the Government of India, reductions are to be made in fixed proportions from the quota of the several provinces.

Responsibility.—The first steps towards responsibility were to transform the Provincial Legislative Council into a body of sufficient size and with a sufficiently large elected majority (which the Act fixes at 70 per cent. as a minimum) to represent adequately public opinion in the province, and to create an electorate. The first franchise rules have given the vote to about 5,000,000 of the adult male population, and have enabled the Legislative Council of any "Governor's province" to extend the franchise to women. The following table shows the strength and composition of each of the Provincial Councils :—

Province.	Elected.	Nominated and *ex-officio*.		Total.
		Officials.	Non-officials.	
Madras	98	23	6	127
Bombay	86	20	5	111
Bengal	113	20	6	139
United Provinces	100	18	5	123
Punjab	71	16	6	93
Bihar and Orissa	76	18	9	103
Central Provinces	53	10	5	68
Assam	39	9	5	53
Burma	78	15	8	101

The figures for officials in this table are maxima in every case, and where less than the maximum number of officials is nominated to any Council, the number of nominated non-officials must be increased in proportion; *e.g.*, if there are only 16 officials (nominated and *ex-officio*) on the United Provinces Council, there must be seven nominated non-officials. The official members who have seats *ex-officio* are the members of the Executive Council, who are at present four in number, the statutory maximum in Madras, Bombay, and Bengal, three in Bihar and Orissa, and two in each of the remaining provinces. These Executive Councils contain an equal

number of Indian and British members except in Bihar and Orissa where two of the three members are British officials.

Electorates.—The electorates in each province are arranged for the most part on a basis which is designed to give separate representation to the various races, communities, and special interests into which the diverse elements of the Indian population naturally range themselves. Although there are minor variations from province to province, a table showing their character in one province (Bengal) will give a sufficiently clear idea of the general position.

Class of Electorate.	No. of Electorates of this Class.	No. of Members returnable by Electorates of this Class.
Non-Muhammadan	42	46
Muhammadan	34	39
European	3	5
Anglo-Indian (in the technical sense of persons of mixed European and Asiatic descent).	1	2
Landholders	5	5
University	1	1
Commerce and Industry	8	15
Total	94	113

Of the 94 constituencies in Bengal, all but nine those representing the University and Commerce and Industry) are arranged on a territorial basis, *i.e.*, each constituency consists of a group of electors, having the prescribed qualifications which entitle them to a vote in a constituency of that class, who inhabit a particular area. The normal area for a " Muhammadan " or "non-Muhammadan" constituency is a district (or where districts are large and populous, half a district) in the case of rural constituencies, and, in the case of urban constituencies, a group of adjacent municipal towns. Some large towns form urban constituencies by themselves, and the City of Calcutta provides eight separate constituencies, six "non-Muhammadan " and two " Muhammadan " the latter, of course, being coterminous with the former.

Throughout the electoral rules there runs a general classification of the various kinds of constituencies into two broad categories, those which are designed to represent special interests, such as Landholders, Universities, Planters or Commerce being described as "special" constituencies, and those which are based on a racial distinction—Muhammadan, European, Sikh, etc.—being known as 'general" constituencies.

Voters' Qualifications.—The qualifications for electors (and consequently for candidates) vary in detail from province to province, chiefly on account of variations in the laws and regulations which form the basis of assessment of income or property values. Generally speaking, both in rural and urban areas the franchise is based on a property qualification as measured by the payment of a prescribed minimum of land revenue or of its equivalent, or of income tax, or of municipal taxes, but in all provinces retired, pensioned or discharged officers and men of the regular army are entitled to the vote, irrespective of the amount of their income or property.

Election Results.—A Parliamentary Paper (Cmd. 2923), published in 1927, gives the following summary of election results. This return relates to the third General Election which took place in 1926, except in the case of the Council of State and the Burma Legislative Council the elections to which took place in 1925. In these two cases the elections were the second under the Act of 1919, because the Council of State has a life-time of five years as compared with three years in the case of the Legislative Assembly and the Provincial Councils; and because the Reforms were inaugurated in Burma two years later than in other provinces.

The figures given for the number of electors who voted and the percentages of the number who voted to the number on the electoral roll are, in the case of plural member constituencies approximate only. In these constituencies each elector has as many votes as there are seats to be filled and the figures are calculated on the assumption that each elector used all his votes; that is, the figure given as the number of electors who voted is the result of dividing the number of votes polled by the number of seats to be filled.

Madras Legislative Council.

Class of Constituency. (1)	No. of Seats. (2)	No. of Seats filled without Contest. (3)	No. of Candidates for contested Seats. (4)	Percentage of Votes polled to No. of Electors in contested Constituencies. (5)	Percentage in 1923. (6)
Non-Muhammadan, urban	9	—	19	69·69	60.5
,, rural	56	6	113	46·59	34·0
Muhammadan, urban	2	—	4	50·78	59·5
,, rural	11	5	21	56·52	52·8
Indian Christians	5	—	13	69·35	59·3
European	1	1	1	—	—
Anglo-Indian	1	—	3	68·30	—
Landholders	6	2	11	94·83	73·1
University	1	1	1	—	55·8
Planters	1	1	1	—	—
European Commerce	3	3	3	—	—
Indian Commerce	2	1	3	97·8	—
Total	98	20	193	48·29	36·

TOTAL ELECTORATE : 1,377,466.

Of the 173 candidates for contested seats, 15 forfeited their deposit, having failed to secure one-eighth of the number of votes polled.

Bombay Legislative Council.

Class of Constituency. (1)	No. of Seats. (2)	No. of Seats filled without Contest. (3)	No. of Candidates for contested Seats. (4)	Percentage of Votes polled to No. of Electors in contested Constituencies. (5)	Percentage in 1923. (6)
Non-Muhammadan, urban	11	—	39	35·59	37·5
,, rural	35	1	82	42·92	30·4
Muhammadan, urban	5	—	15	36·50	39·7
,, rural	22	3	49	38·32	52·1
European	2	2	2	—	—
Landholders	3	—	9	63·51	38·5
University	1	—	3	65·73	60·5
European Commerce	4	4	4	—	—
Indian Commerce	3	2	5	60·94	68·6
Total	86	12	208	40·55	48·2

TOTAL ELECTORATE : 778,321.

Of the 196 candidates for contested seats, 36 forfeited their deposit, having failed to secure one-eighth of the number of votes polled.

Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates for contested Seats.	Percentage of Votes polled to No. of Electors in contested Constituencies.	Percentage in 1923.
(1)	(2)	(3)	(4)	(5)	(6)

Bengal Legislative Council.

Non-Muhammadan, urban	11	3	23	48·36	50·1
„ rural	35	6	79	39·45	42·8
Muhammadan, urban	6	1	13	41·07	49·6
„ rural	33	3	91	37·03	32·4
Landholders	5	—	13	72·01	82·9
Universities	2	—	5	77·78	76·8
European, General	5	5	5	—	—
„ Commerce	11	11	11	—	91·2
Anglo-Indian	2	—	4	35·8	—
Indian Commerce	4	2	8	94·7	77·1
Total ..	114	31	232	39·25	39·0

TOTAL ELECTORATE: 1,184,784.

Of the 221 candidates for the contested seats, 50 forfeited their deposit, having failed to secure one-eighth of the number of votes polled.

United Provinces Legislative Council.

Non-Muhammadan, urban	8	1	24	45·59	46·7
„ rural	52	5	128	49·3	40·2
Muhammadan, urban	4	—	9	42·04	49·1
„ rural	25	7	50	64·5	54·8
European	1	—	2	14·2	—
Landholders	6	1	10	57·0	42·6
University	1	—	2	71·7	74·9
Commerce, European	2	2	2	—	—
„ Indian	1	1	1	—	94·0
Total ..	100	17	228	50·2	33·0

TOTAL ELECTORATE: 1,598,673.

Of the 211 candidates for the contested seats, 30 forfeited their deposit, having failed to secure one-eighth of the number of votes polled.

Punjab Legislative Council.

Non-Muhammadan, urban ..	7	1	18	52·0	59·0
„ rural ..	13	—	31	53·6	49·0
Muhammadan, urban	5	—	12	59·0	61·0
„ rural	27	6	62	54·0	52·0
Sikhs	12	5	19	45·0	38·0
Landholders	4	4	4	—	78·0
University	1	—	2	80·37	84·0
Commerce	1	1	1	—	79·0
Industry	1	—	3	86·63	—
Total ..	71	17	152	51·42	49·3

TOTAL ELECTORATE: 702,835.

Of the 135 candidates for contested seats, 19 forfeited their deposit, having failed to secure one-eighth of the number of votes polled.

Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates for contested Seats.	Percentage of Votes polled to No. of Electors in contested Constituencies.	Percentage in 1923.
(1)	(2)	(3)	(4)	(5)	(6)

Bihar and Orissa Legislative Council.

Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates for contested Seats.	Percentage of Votes polled to No. of Electors in contested Constituencies.	Percentage in 1923.
Non-Muhammadan, urban ..	6	..	13	49·4	46·7
,, rural ..	42	6	95	62·5	52·8
Muhammadan, urban	3	..	7	61·2	52·9
,, rural	15	2	32	64·5	60·6
European	1	1	1	..	..
Landholders	5	2	9	85·5	81·7
University	1	..	3	85·5	76·7
Planters, European	1	1	1	..	..
Mining, Indian	1	1	1	..	..
,, European	1	1	1	..	..
Total ..	76	14	163	60·54	52·2

TOTAL ELECTORATE: 374,818.

Of the 149 candidates for contested seats, 17 forfeited their deposits, having failed to secure one-eighth of the number of votes polled.

Central Provinces and Berar Legislative Council.

Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates for contested Seats.	Percentage of Votes polled to No. of Electors in contested Constituencies.	Percentage in 1923.
Non-Muhammadan, urban ..	9	1	26	58·18	56·6
,, rural	32	2	76	58·88	57·4
Muhammadan, urban	1	1	1	..	65·6
,, rural	6	1	14	67·12	56·8
Landholders	3	..	7	70·05	61·6
Mining	1	..	2	68·0	83·3
Commerce and Industry	2	1	3	72·9	71·7
University	1	..	3	91·36	93·0
Total	55	7	132	61·9	57·7

TOTAL ELECTORATE: 170,924.

Of the 125 candidates for contested seats, 12 forfeited their deposit having failed to secure one-eighth of the number of votes polled.

Assam Legislative Council.

Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates for contested Seats.	Percentage of Votes polled to No. of Electors in contested Constituencies.	Percentage in 1923.
Non-Muhammadan, urban ..	1	..	3	55·3	52·2
,, rural	20	6	40	38·63	38·2
Muhammadan, rural	12	1	26	53·59	49·9
Planters	5	5	5	..	—
Commerce (European)	1	..	2	92·1	—
Total ..	39	12	76	44·17	42·1

TOTAL ELECTORATE: 249,747.

Of the 64 candidates for the contested seats, 3 forfeited their deposit, having failed to secure one-eighth of the number of votes polled.

Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates for contested Seats.	Percentage of Votes polled to No. of Electors in contested Constituencies.	Percentage in 1923.
(1)	(2)	(3)	(4)	(5)	(6)

Burma Legislative Council.

Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates for contested Seats.	Percentage of Votes polled to No. of Electors in contested Constituencies.	Percentage in 1923.
General, urban	14	1	36	40·9	
Indian, urban	8	1	19	51·15	
Karen, rural	5	3	7	21·0	
General, rural	44	3	149	15·0	
Anglo-Indian	1	..	2	28·0	
European	1	1	1	..	
Commerce	5	5	5	..	
University	1	1	1	..	
Total ..	79	15	220	16.0	

TOTAL ELECTORATE : 1,821,155.

Legislative Assembly.

Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates for contested Seats.	Percentage of Votes polled to No. of Electors in contested Constituencies.	Percentage in 1923.
Madras—					
Non-Muhammadan	10	3	20	41·33	42.8
Muhammadan	3	2	7	61·0	52.6
European	1	1	1	..	..
Landholders	1	..	2	82·0	41.0
Indian Commerce	1	1	1	..	..
Bombay—					
Non-Muhammadan	7	1	15	48·94	39.3
Muhammadan	4	..	10	39·51	33.8
European	2	2	2	..	..
Landholders	1	1	1	..	51.2
Indian Commerce	2	2	2	..	94.9
Bengal—					
Non-Muhammadan	6	2	10	49·0	39.4
Muhammada	6	..	16	46·48	39.4
European	3	3	3	..	..
Landholders	·1	..	3	76·1	24.4
Indian Commerce	1	1	1	..	..
United Provinces—					
Non-Muhammadan	8	2	16	51·4	43.1
Muhammadan	6	2	12	57·53	51.1
European	1	1	1	..	..
Landholders	1	1	1	..	29.2
Punjab—					
Non-Muhammadan	3	..	7	62·0	61.0
Muhammadan	6	1	15	64·10	64.0
Sikh	2	1	3	52·0	53.0
Landholders	1	..	4	87·0	84.0
Bihar and Orissa					
Non-Muhammadan	8	..	17	52·3	42.1
Muhammadan	3	1	5	59·04	55.2
Landholders	1	1	1	..	67.4

Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates for contested Seats.	Percentage of Votes polled to No. of Electors in contested Constituencise.	Percentage in 1923.
(1)	(2)	(3)	(4)	(5)	(6)

Legislative Assembly—*contd*

Central Provinces and Berar—					
Non-Muhammadan	4	1	7	75·65	44·1
Muhammadan	1	1	1	—	—
Landholders	1	—	2	37·8	—
Assam—					
Non-Muhammadan	2	1	5	56·40	—
Muhammadan	1	—	3	52·43	44·0
European	1	1	1	—	—
Delhi (General)	1	—	3	65·0	30·0
Burma—					
Non-European	3	—	4	13·77	23·3
European	1	1	1	—	—
Ajmer-Merwara (General)	1	—	3	66·42	74·5
Total ..	105	34	206	48·07	41.9

—	Provincial percentage of votes polled in contested constituencies.	No. of candidates who forfeited deposit.
Madras	48·44	3
Bombay	46·18	6
Bengal	42·12	6
United Provinces	51·76	1
Punjab	62·79	4
Bihar and Orissa	52·57	—
Central Provinces and Berar	75·2	—
Assam	54·25	—
Burma	13·77	—
Delhi	65·0	—
Ajmer-Merwara	66·42	1

TOTAL ELECTORATE: 1,125,602.

TOTAL NUMBER OF VOTERS IN CONSTITUENCIES.. 835,437

NUMBER OF VOTES POLLED ,, ,, ... 401,575

Women Voters.

At the time of the elections in 1926 women were enfranchised in six provinces. The following figures give the number enfranchised in each province, and the number who voted, except in the case of one province (Assam), where no separate record was kept of male or female voters :—

A.—Provincial Legislative Councils.

Province.	No. enrolled.	No. enrolled in contested Constituencies.	No. who voted.	Percentage of Col. 4 on Col. 3.
(1)	(2)	(3)	(4)	(5)
Madras	114,199	106,875	19,684	18·5
Bombay	38,478	37,974	7,616	20·1
United Provinces	75,105	69,797	4,414	6·3
Punjab	16,655	13,280	1,190	8·9
Burma..	102,177	100,417	9,875	9·8

B.—Legislative Assembly.

Province.	No. enrolled.	No. enrolled in contested Constituencies.	No. who voted.	Percentage of Col. 4 on Col. 3.
Madras	18,375	13,179	2,910	22·1
Bombay	4,404	2,810	343	12·2
United Provinces	6,071	4,627	210	4·5
Punjab	2,065	1,217	150	12·3
Burma..	5,193	Not recorded separately.		

Council of State.

(Second Election of 1925.)

Place and Class of Constituency.	No. of Seats.	No. of Seats filled without Contest.	No. of Candidates.	Total No. of Electors.	Total No. of Electors who voted.	Percentage of Votes polled to No. of Electors in contested Constituencies.	Percentage in 1921.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Madras—							
Non-Muhammadan ..	4	—	7	2,559	2,157	84·0	74
Muhammadan	1	—	2	132	122	92·0	61
Bombay—							
Non-Muhammadan ..	3	—	6	1,278	329	26·0	33
Muhammadan	1	—	4	115	103	92·0	—
,, (Sind)	1	1	1	382	—	—	—
Chamber of Commerce ..	1	1	1	51	—	—	—
Bengal—							
East: Non-Muhammadan.	1	1	1	590	—	—	67
West: ,, ..	2	—	4	882	635	78·5	
East: Muhammadan ..	1	—	4	583	358	61·0	34
West: ,, ..	1	—	4	201	162	83·0	
Chamber of Commerce ..	1	1	1	137	—	—	—
United Provinces—							
Northern: Non-Muhammadan.	1	—	4	889	537	60·0	
Central: ,, ..	1	1	1	637	—	—	53
Southern ,, ..	1	—	3	1,475	831	56·0	
East: Muhammadan ..	1	1	1	201	—	—	—
West: ,, ..	1	—	2	293	227	77·0	—
Punjab—							
Non-Muhammadan ..	1	1	1	1,038	—	—	46
Muhammadan	1	—	2	1,082	713	66·0	64
Sikh	1	—	2	519	379	73·0	—
Bihar and Orissa—							
Non-Muhammadan ..	3	—	8	1,970	1,560	79·0	50
Muhammadan	1	—	2	422	350	83·0	—
Central Provinces: General .	1	—	4	662	477	70·0	25
Berar: General	1	1	1	402	—	—	—
Assam: Muhammadan ..	1	1	1	71	—	—	58
Burma—							
General	1	—	2	15,486	764	5·0	15
Chamber of Commerce ..	1	1	1	69	—	—	—
Total ..	34	10	70	32,126	9,704	34·0	55

POWERS OF PROVINCIAL LEGISLATIVE COUNCILS.

In origin the legislative authority in British India was a meeting of the Governor-General (or, in the case of the Presidencies of Madras and Bombay, of the Governor) with his Executive Council, "for the purpose of legislation." When met for this purpose there were added to the Executive Council certain "additional members," at first very few in number, and those few all nominated by the Governor-General or the Governor, as the case might be. A Council so constituted had originally no powers or duties beyond those immediately arising out of the discussion of the particular legislative measure which at the time was engaging its attention, and its functions were confined strictly to the discussion and enactment of legislative measures. In course of time the number of "additional" members, and the proportion of these who were non-official Indians, were steadily increased, the principle of election was gradually substituted for nomination as the means of selecting non-official members, and the functions of the Councils were extended so as to include the right of interpellation, of the discussion of matters of general public interest, and of criticising and discussing the budget proposals of the Executive Government. This extension of the powers of the Councils was in the main the result of the "Morley-Minto Act" of 1909. The Indian Councils Act of 1892 had given power to discuss the budget but not to divide the Council upon it. Lord, Morley's Act went further and provided that notwithstanding the terms of the Indian Councils Act of 1861 which had restricted the powers of all Councils to the discussion of legislative measures, the Local Government might make rules authorising the discussion of the annual financial statement, of any matter of general public interest, and the asking of questions under such conditions and restrictions as might be imposed by the rules, and these rules recognised the right of the Councils to vote on motions thus submitted for their discussion. The other results of the Act of 1909 were definitely to recognise the principle of election as the means of selecting non-official members of all Councils (although the method adopted was mainly that of indirect election), a considerable increase in the number of both non-official and official members, and the setting up in every province of a non-official (though not, save in one province, an elected) majority. A further important, though indirect, result of the Morley-Minto Act was the appointment of an Indian member to the Executive Council of the Governor-General, and to such Provincial Executive Councils as were then in existence and subsequently created.

Old System.—But although the Legislative Councils (which, originally created in two provinces only in addition to the Governor-General's Legislative Council, existed in 1919 in nine provinces) had steadily acquired a more and more representative character and a large share of the normal functions of a legislative assembly as generally understood, they still remained in theory up to the passing of the Act of 1919 mere accretions to the Executive Government of the provinces for the purpose of advising on, and enacting, legislation. It is true that the non-official element in the Provincial Councils as constituted by Lord Morley's Act of 1909 had acquired a considerable measure of control over legislation, in view of the fact that in most provinces that Act and the rules framed under it placed the non-official members in a slight majority over their official colleagues; but for various reasons this control, even in the sphere of legislation, can hardly be described as definite popular control, and over matters outside the legislative sphere the Councils had no controlling voice at all.

The Changes.—The most important changes made by the Act of 1919 in the powers of the Provincial Councils were—

(*i*) the power to vote (and consequently to withhold) supplies;

(*ii*) a greatly enhanced freedom of initiation in the matter of legislation; and

(*iii*) power to frame their own rules of procedure in matters of detail, subject to the Governor's concurrence.

A further right which the Councils will acquire after four years from the time of their commencement is the right to elect their own President; At the outset the President is nominated by the Governor, but from the start every Council has an elected Deputy President. The Governor (who formerly was *ex-offico* President of his Legislative Council) no longer has any direct connection with its proceedings. The first-named of these newly acquired powers is of sufficient importance to require a detailed explanation of its scope, which can best be given in the terms of the Act itself (section 72D).

72D.—(1) The provisions contained in this section shall have effect with respect to business and procedure in governors' legislative councils.

(2) The estimated annual expenditure and revenue of the province shall be aid in the form of a statement before the council in each year and the proposals of the local government for the appropriation of provincial revenues and other moneys in any year shall be submitted to the vote of the council in the form of demands for grants. The council may assent, or refuse its assent, to a demand, or may reduce the amount therein referred to either by a reduction of the whole grant or by the omission or reduction of any of the items of expenditure of which the grant is composed:—

Provided that—

(*a*) the local government shall have power, in relation to any such demand, to act as if it had been assented to, notwithstanding the withholding of such assent or the reduction of the amount therein referred to, if the demand relates to a reserved subject, and the governor certifies that the expenditure provided for by the demand is essential to the discharge of his responsibility for the subject; and

(*b*) the governor shall have power in cases of emergency to authorise such expenditure as may be in his opinion necessary for the safety or tranquillity of the province, or for the carrying on of any department; and

(c) no proposal for the appropriation of any such revenues or other moneys for any purpose shall be made except on the recommendation of the governor, communicated to the council.

(3) Nothing in the foregoing sub-section shall require proposals to be submitted to the council relating to the following heads of expenditure :—

(i) Contributions payable by the local government to the Governor-General in Council ; and

(ii) Interest and sinking fund charges on loans ; and

(iii) Expenditure of which the amount is prescribed by or under any law ; and

(iv) Salaries and pensions of persons appointed by or with the approval of His Majesty or by the Secretary of State in Council ; and

(v) Salaries of judges of the high court of the province and of the advocate-general.

If any question arises whether any proposed appropriation of moneys does or does not relate to the above heads of expenditure, the decision of the governor shall be final.

Executive and Legislature.—In the light of these facts it is now possible to explain more exactly the relationship between the provincial executive and the provincial legislature. The dual character of the former has already been mentioned, and the corresponding bifurcation of provincial subjects into "reserved" and "transferred" categories. The rules under the act prescribe a list of 20 subjects which are transferred to the administration of the Governor acting with Ministers, the more important of which are Local Self-Government, Medical Administration, Public Health, Education (with certain reservations), Public Works, Agriculture, Excise, and Development of Industries. The "reserved" subjects comprise all those in the list of "provincial" (as distinct from "central") subjects which are not transferred.

Machinery.—No change has been made by the Act of 1919 in the machinery and methods of administration by the Governor in Council ; decisions are taken at the Council Board, as before, by a majority vote, and the Governor is entitled, as before, to overrule such a vote in certain specified circumstances if he disagrees with it. For such decisions the Governor in Council remains, as before, responsible to the Secretary of State and Parliament, and on questions of legislation and supply he has the power of enforcing them despite opposition by a majority of the Legislative Council. But, the whole spirit of the Act, and the existence of a large non-official elected majority in every Provincial Legislative Council is an important factor in determining the policy to be pursued by the official half of the Government in its administration of reserved subjects. A further and not less important factor is the existence in the Government, side by side with the Executive Council, of two or more Ministers appointed from the elected members of the legislature, who, though they are not charged by law with, and in fact are legally absolved from, any responsibility for decisions on matters outside the transferred sphere, will necessarily be able, and in fact are expected, to make their opinions felt by their colleagues in the Executive Council. But these factors, while they will doubtless lead to constant endeavour on the part of the official half of the Government to accommodate its policy to the wishes of its ministerial colleagues and of the majority of the legislature, and to avoid situations which involve resort to the enforcement of its decisions in the face of popular opposition, are not intended to obscure the responsibility to Parliament in the last resort of the Governor in Council for the administration of reserved subjects and the right of His Majesty's Government, and of the Secretary of State as a member thereof, to lay down and require the observance of any principles which they regard as having the support of Parliament and, in the last resort of the British electorate.

Transfer of Control.—With regard to transferred subjects the position is very different. Here there has been an actual transfer of control from the British elector and the British Parliament to the elector and the Legislative Council in the Indian province. The provincial subjects of administration are grouped into portfolios, and just as each member of the Executive Council has charge of a portfolio consisting of a specified list of "reserved" subjects or "departments," so each Minister is directly responsible for the administration of those particular transferred "departments" which are included in his portfolio. But his responsibility lies, not, as in the case of a member of the Executive Council, to the Government of India, the Secretary of State and Parliament, but to the Provincial Legislative Council of which he is an elected member and from which he is selected by the Governor as commanding or likely to command the support of the majority of that body. He holds office during the Governor's pleasure, but his retention of office is contingent on his ability to retain the confidence not only of the Governor, but also of the Legislative Council, upon whose vote he is directly dependent for his salary. Further, the control of the Legislative Council over transferred subjects, both as regards supplies and legislation, is almost entirely free from the restrictions just noticed which necessarily qualify its control over the "reserved" subjects. It is thus within the power of the Provincial Council to insist on the pursuit of a policy of its own choice in the administration of transferred subjects by withdrawing its confidence from a Minister who departs from that policy and bestowing it only on a successor who will follow its mandate ; and this power is dependent on the provincial elector in virtue of his freedom to control the composition of the Legislative Council by the use which he makes of his vote. No doubt this statement requires some qualification before it can be accepted as literally accurate, for, technically, the authority charged with the administration of transferred subjects is "*the Governor acting with Ministers* appointed under this Act," not the Ministers acting on their own initiative, and, further the Governor, who is not, of course, subject to removal from office by the Legislative Council, is charged personally with responsibility for the peace and tranquillity of his province, and would be entitled, and indeed bound, to recommend the removal of a department from the transferred list if he found the legislature bent on pursuing a policy in its administration

which, in his judgment, was incompatible with the maintenance of peace and tranquillity; yet the powers of control vested in the Legislative Council over the transferred sphere are undoubtedly great, and it was the opinion at all events of the Joint Select Committee that legislature and Ministers should be allowed to exercise them with the greatest possible freedom. "If after hearing all the arguments," observed the Committee, "Ministers should "decide not to adopt his advice, then in the "opinion of the Committee the Governor should "ordinarily allow Ministers to have their way, "fixing the responsibility upon them, even if "it may subsequently be necessary for him to "vote any particular piece of legislation. It "is not possible but that in India, as in all other "countries, mistakes will be made by Ministers "acting with the approval of a majority of the "Legislative Council, but there is no way of "learning except through experience and "the realisation of responsibility."

Provision of Funds.—The terms of the Act leave the apportionment of the provincial revenues between the two halves of the executive for the financing of reserved and transferred subjects respectively to be settled by rules, merely providing that rules may be made "for "the allocation of revenues or moneys for the "purpose of such 'administration' *i.e.*, the "administration of transferred subjects by the "Governor acting with Ministers". Probably the best description available of the method adopted by the rules for the settlement of this matter is the recommendation of the Joint Select Committee whose proposals have been followed with one modification only to enable the Governor to revoke at any time, at the desire of his Council and Ministers an "order of allocation" or to modify it in accordance with their joint wishes. The passage is as follows :—

"The Committee have given much attention to the difficult question of the principle on which the provincial revenues and balances should be distributed between the two sides of the provincial governments. They are confident that the problem can readily be solved by the simple process of common sense and reasonable give-and-take, but they are aware that this question might, in certain circumstances, become the cause of much friction in the provincial government, and they are of opinion that the rules governing the allocation of these revenues and balances should be framed so as to make the existence of such friction impossible. They advise that, if the Governor, in the course of preparing either his first or any subsequent budget, find that there is likely to be a serious or protracted difference of opinion between the Executive Council and his Ministers on this subject he should be empowered at once to make an allocation of revenue and balances between the reserved and transferred subjects which should continue for at least the whole life of the existing Legislative Council. The Committee do not endorse the suggestion that certain sources of revenue should be allocated to reserved and certain sources to transferred subjects, but they recommend that the Governor should allocate a definite proportion of the revenue, say, by way of illustration, two-thirds to reserved and one-third to transferred subjects, and similarly a proportion, though not necessarily the same fraction of the balances. If the Governor desires assistance in making the allocation, he should be allowed at his discretion to refer the question to be decided to such authority as the Governor-General shall appoint. Further, the Committee are of opinion that it should be laid down from the first that, until an agreement which both sides of the Government will equally support has been reached, or until an allocation has been made by the Governor, the total provisions of the different expenditure heads in the budget of the province for the preceding financial year shall hold good.

The Committee desire that the relation of the two sides of the Government in this matter as in all others, should be of such mutual sympathy that each will be able to assist and influence for the common good the work of the other, but not to exercise control over it. The budget should not be capable of being used as a means for enabling Ministers or a majority of the Legislative Council to direct the policy of reserved subjects; but on the other hand the Executive Council should be helpful to Ministers in their desire to develop the departments entrusted to their care. On the Governor personally will devolve the task of holding the balance between the legitimate needs of both sets of his advisers."

THE CENTRAL GOVERNMENT.

The structural changes made by the Act of 1919 in the system of government outside the nine "Governors provinces" are of comparatively minor scope, though the spirit of the Act requires, as has already been shown, considerable modification of the relationship hitherto subsisting between the Provincial Governments on the one hand and the Government of India and the Secretary of State in Council on the other. The only concrete changes made in the constitution of the Central Government are the removal of the statutory bar to the appointment of more than six members of the Governor-General's Executive Council (which, however, has had the far-reaching consequence that three of the eight members of the Council are now Indians), and the reconstitution in a much more enlarged representative and independent form of the central legislature. It has already been observed that this body was, in origin, like all other legislative bodies in India, the Governor-General's Executive Council with the addition of certain "additional members" appointed to assist the Executive Council in the formulation of legislation. Despite its steady growth in size and influence, and despite the introduction of the elective system, the existence of "additional members," who of course under Lord Morley's Act greatly preponderated in numbers over the members proper, *i.e.*, the Executive Councillors, still persisted up to the passing of the Act of 1919. That Act, however, has entirely remodelled the "Indian Legislature,"-

as it is now called, which has become, like the Legislative Council in a Governor's province a legislature with all the inherent powers ordinarily attributed to such a body save such as are specifically withheld by the terms of the Act. It consists of two Chambers. The "Council of State" contains 60 members, of whom 34 are elected (including one member to represent Berar, who, though technically nominated, is nominated as the result of elections held in Berar) and 26 nominated, of whom not more than 20 may be officials. The "Legislative Assembly" consists of 144 members, of whom 104 are elected (including in the case of the Council of State, one Berar member, who, though actually elected, is technically a nominee). Of the 40 nominated members, 26 are required to be officials. The members of the Governor-General's Executive Council are not *ex-officio* members of either Chamber, but each of them has to be appointed a member of one or other Chamber, and can vote only in the Chamber of which he is a member. Any member of the Executive Council may, however, speak in either Chamber. The President of the Upper Chamber is a nominee of the Governor-General, as also, for the first four years after the constitution of the Chamber, is the President of the Legislative Assembly. But after that period the Lower Chamber is to elect its own President, and it elects its own Deputy-President from the outset. The normal lifetime of each Council of State is five years, and of each Legislative Assembly three years; but either Chamber, or both simultaneously, may be dissolved at any time by the Governor-General.

Election.—The method of election for both Chambers is direct, and although the number of electors is considerably smaller than for the Provincial Councils, it is a great advance on the very restricted and for the most part indirect franchise established under the Act of 1909 for the unicameral central legislature which no longer exists. Generally speaking, the electoral scheme for the Lower Chamber is on the same model as that for the Provincial Councils already described, except that, *firstly*, the property qualification for voters (and consequently for candidates) is higher in order to obtain manageable constituencies, and past service with the colours is not *per se* a qualification for the franchise, and *secondly*, that the constituencies necessarily cover a considerably larger area than constituencies for the Provincial Council. The distribution of seats in both Chambers, and the arrangement of constituencies, are on a provincial basis; that is a fixed number of the elective seats in each Chamber is assigned to representatives of each province, and these representatives are elected by constituencies covering an assigned area of the province.

The following table shows the allotment of the elective seats:—

	Legislative Assembly.	Council of State.
Madras	16	5
Bombay	16	6
Bengal	17	6
United Provinces ..	16	5
Punjab	12	4
Bihar and Orissa ..	12	3
Central Provinces ..	6	2
Assam	4	1
Burma	4	2
Delhi .. .	1	..
	104	34

Since the area which returns perhaps 80 members to a Provincial Council is the same as the area which returns perhaps 12 members to the Legislative Assembly—namely, the entire province in each case—it follows that on the direct election system this area must be split into constituencies which are much larger than the constituencies for the local Councils, and just as it is generally correct to say that the normal area unit for those rural constituencies for the latter which are arranged on a territorial basis is the district, it may be said that the normal area unit in the case of the Legislative Assembly is the Division (the technical term for the administrative group of districts controlled by a Divisional Commissioner).

The Franchise.—The general result of the first franchise arrangements under the Act is thus that there is in each province a body of electors qualified to vote for, and stand for election to, the Provincial Council, and that a selected number of these voters are qualified to vote for and stand for election to those seats in the Legislative Assembly which are assigned to the province. The qualifications for candidature for the Legislative Assembly are the same in each province, *mutatis mutandis*, as for candidature for the Provincial Council, except that in all provinces, so long as the candidate can show that he resides somewhere within the province, no closer connection with his particular constituency is insisted upon.

The franchise for the Council of State differs in character from that for the Provincial Council and the Legislative Assembly. The concern of the framers of the Act and rules was to secure for the membership of this body a character as closely as possible approximating to a "Senate of Elder Statesmen" and thus to constitute a body capable of performing the function of a true revising Chamber. With this object, in addition and as an alternative to a high property qualification—adopted as a rough and ready method of enfranchising only persons with a stake in the country—the rules admit as qualifications certain personal attributes which are likely to connote the possession of some past administrative experience or a high standard of intellectual attainment. Examples of these qualifications are past membership of either Chamber of the Legislature as now constituted, or of its predecessor, or of the Provincial Council, the holding of high office in local bodies (district boards, municipalities and corporations), membership of the governing bodies of Universities, and the holding of titles conferred in recognition of Indian classical learning and literature.

Powers :—The powers and duties of the Indian legislature differ but little in character within the "central" sphere from those of the provincial Councils within their provincial sphere, and it has acquired the same right of voting supplies for the Central Government

But as no direct attempt has yet been made to introduce responsible government at the centre, the step in that direction having been avowedly confined to the provinces, and as consequently the Executive Government of India remains legally responsible as a whole for the proper fulfilment of its charge to the Secretary of State and Parliament, it follows that the powers conferred on provincial Governors to disregard an adverse vote of the Legislative Council on legislation or supplies are, as conferred on the Governor-General in his relationship with the Indian Legislature, less restricted in their operation than in the provinces; that is to say, they cover the whole field and are not confined in their application to categories of subjects.

THE INDIA OFFICE.

The Act makes no structural changes in the part played by the India Office in the administration of Indian affairs. Slight alterations have been effected in the number and tenure of office of the members of the Secretary of State's Council, and some relaxations have been made in the statutory rigidity which formerly bound their procedure and that of the Office in general. But provisions now exist which will undoubtedly as time goes on have a material effect on the activities of the Office as it is now constituted. A High Commissioner for India has been appointed for the purpose of taking over, as the direct agent of the Government of India, that portion of India Office functions which is of the nature of agency, as distinct from administrative supervision and control. The process of separation of staff and functions for the purpose of this transfer will necessarily be somewhat slow, but a substantial beginning has been made by handing over to the direct control of the High Commissioner the large departments which are concerned with the ordering and supply of stores and stationery in England for Government use in India, with the payment of pensions to retired members of Indian services resident in the United Kingdom, and with the assistance of Indian students in England. Concurrently with this change, it is now possible to defray from British revenues the salaries of the Secretary of State and of the Parliamentary Under-Secretary, and that portion of the cost of salaries of India Office staff and general maintenance which is attributable to the exercise of its administrative as distinct from purely agency functions.

In due course the apportionment to British estimates will be the cost of the India Office as it exists after the transfer of functions to the High Commissioner has been completely effected; then the salaries of the High Commissioner and his staff will be the only expenses in the United Kingdom chargeable to Indian revenues. Until that time arrives, however, an estimate was the only basis for settlement, and for five years from 1920-21, the cost of the India Office payable from British revenues has been fixed at 136,500*l*., which includes the salaries of the Secretary of State and of the Parliamentary Under-Secretary, and a contribution of 40,000*l*., which has for some years been made by the Treasury towards Indian expenditure, as the result of the recommendations of the Welby Commission.

THE FUTURE.

The Act of 1919 and its provisions are essentially transitional. It is intended, not to set up a new and permanent constitution, but to make such changes in the law as will enable "the progressive realisation of responsible Government in British India as an integral part of the Empire." This feature of the Act was clearly expressed in its Preamble but although the Preamble finds no place in the law as amended by the Act of 1919, that law now contains provision for the appointment, after a period of 10 years' trial of the law in its amended form, of a Parliamentary Commission "for the purpose of inquiring into the working of the system of government, the growth of education, and the development of representative institutions in British India, and matters connected therewith," and such a Commission, when appointed, is directed to "report as to whether it is desirable to establish the principle of responsible government, or to extend, modify, or restrict the degree of responsible government then existing" in British India.

Statutory Commission appointed.—On November 8, 1927, the Prime Minister (Mr. Baldwin) made the following statement in the House of Commons, announcing the appointment, personnel and programme of the Statutory Commission on Indian Reforms.

"As the House will remember, one of the provisions contained in the Indian Reforms Act of 1919 required, "at the expiration of ten years after the passing" of that Act, the appointment, with the concurrence of both Houses of Parliament, of persons to be a Commission to inquire into the working of the Indian Constitution and to consider the desirability of establishing, extending, modifying, or restricting the degree of responsible government then existing there. The Government have decided, for various reasons which I need not now specify that it is desirable to anticipate the date (December, 1929) contemplated by the Act, and to appoint this most important Royal Commission forthwith.

Balancing the various considerations and endeavouring to give due weight to each, His Majesty's Government have decided upon the following procedure:—

(*a*) They propose to recommend to His Majesty that the Statutory Commission should be composed as follows:—

The Right Hon. Sir John Simon, K.C.V.O., K.C. (Chairman).
Viscount Burnham, G.C.M.G., C.H.
Lord Strathcona and Mount Royal.
The Hon. E. C. G. Cadogan, C.B.
The Right Hon. Stephen Walsh, (It was subsequently announced that owing to ill-health, **Mr. Walsh** would be unable to serve and **Mr. Vernon Hartsborn** was nominated in his place.)
Colonel the Right Hon. G. R. Lane-Fox.
Major C. R Attlee.

These names will be submitted to both Houses in Resolutions.

(*b*) His Majesty's Government cannot, of course, dictate to the Commission what procedure it shall follow but they are of opinion that its task in taking evidence would be greatly facilitated if it were to invite the Central Indian Legislature to appoint a Joint Select Committee chosen from its elected and nominated unofficial members, which would draw up its views and proposals in writing and lay them before the Commission for examination in such manner as the latter may decide. The Committee might remain in being for any consultation which the Commission might desire at subsequent stages of the inquiry. It should be clearly understood that the purpose of this suggestion is not to limit the discretion of the Commission in hearing other witnesses :

(*c*) His Majesty's Government suggest that a similar procedure should be adopted with the Provincial Legislatures :

(*d*) The vast area to be covered may make it desirable that the task of taking evidence on the more purely administrative questions involved should be undertaken by some other authority which would be in the closest touch with the Commission. His Majesty's Government suggest that the Commission on arrival in India should consider and decide by what machinery this work may most appropriately be discharged, this will not, of course, debar the Commission from the advantage of taking evidence itself upon these subjects to whatever extent it may think desirable :

(*e*) When the Commission has reported and its report has been examined by the Government of India and his Majesty's Government it will be the duty of the latter to present proposals to Parliament. But it is not the intention of his Majesty's Government to ask Parliament to adopt these proposals without first giving a full opportunity for Indian opinion of different schools to contribute its view upon them. And to this end it is intended to invite Parliament to refer these proposals to consideration by a Joint Committee of both Houses and to facilitate the presentation to that Committee both of the views of the Indian Central Legislature by delegations who will be invited to attend and confer with the Joint Committee and also of the views of any other bodies whom the Joint Parliamentary Committee may desire to consult.

The ante-dating of the Commission Involves an amendment of the Act, and a Bill to this end will be introduced at once."

PERSONNEL AND PROCEDURE.

The Governor-General and the "Executive" members of his Council are appointed by the Crown. No limit of time is specified for their tenure of office, but custom has fixed it at five years. There are seven Executive Members of Council. These Members hold respectively the portfolios of Education, Health and Land ; Home ; Finance ; Commerce ; Industries and Labour : Law. The Viceroy acts as his own member in charge of Foreign affairs. Railways are administered by a Chief Commissioner, with the assistance of a Railway Board ; and are for administrative purposes grouped under the ægis of the Commerce Department. The Commander-in-Chief may also be and in practice always is, an "Ordinary" member of the Council. He holds charge of the Army Department. The Governors of Madras, Bombay and Bengal become "extraordinary" members if the Council meets within their Presidencies. The Council may assemble at any place in India which the Governor-General appoints; in practice it meets only in Delhi and Simla.

In regard to his own Department each Member of Council is largely in the position of a Minister of State, and has the final voice in ordinary departmental matters. But any question of special importance, and any matter in which it is proposed to over-rule the views of a Local Government, must ordinarily be referred to the Viceroy. Any matter originating in one department which also affects another must be referred to the latter, and in the event of the Departments not being able to agree, the case is referred to the Viceroy. The Members of Council meet periodically as a Cabinet—ordinarily once or twice a week—to discuss questions which the Viceroy desires to put before them, or which a member who has been over-ruled by the Viceroy has asked to be referred to Council. If there is a difference of opinion in the Council the decision of the majority ordinarily prevails, but the Viceroy can over-rule a majority if he considers that the matter is of such grave importance as to justify such a step. Each departmental office is in the subordinate charge of a Secretary, whose position corresponds very much to that of a permanent Under-Secretary of State in the United Kingdom; but with these differences—that the Secretary is present though does not speak, at Council meetings at which cases under his cognisance are discussed : that he attends on the Viceroy, usually once a week, and discusses with him all matters of importance arising in his Department ; that he has the right of bringing to the Viceroy's special notice any case in which he considers that the Viceroy's concurrence should be obtained to action proposed by the Departmental Member of Council ; and that his tenure of office is usually limited to three years. The Secretaries have under them Deputy, Under and Assistant Secretaries, together with the ordinary clerical establishments. The Secretaries and Under-Secretaries are often, though by no means exclusively, members of the Indian Civil Service. The Government of India has no Civil Service of its own as distinct from that of the Provincial Governments, and officers serving under the Government of India are borrowed from the Provinces, or, in the case of Specialists, recruited direct by contract.

THE DIVISION OF FUNCTIONS.

The keynote of the scheme is effective provincial autonomy and the establishment of an immediate measure of responsibility in the provinces all of which are raised to the status of Governors in Council. This demanded a sharp division between Imperial and Provincial functions. The following subjects are reserved to the Government of India, with the

corollary that all others vest in the Provincial Governments:—

1. (*a*) Defence of India, and all matters connected with His Majesty's Naval, Military, and Air Forces in India, or with His Majesty's Indian Marine Service or with any other force raised in India, other than military and armed police wholly maintained by local Governments.

(*b*) Naval and military works cantonments.

2. External relations, including naturalisation and aliens, and pilgrimages beyond India.

3. Relations with States in India.

4. Political charges.

5. Communications to the extent described under the following heads, namely

(*a*) railway and extra-municipal tramways in so far as they are not classified as provincial subjects under entry 6 (*d*) of Part II of this Schedule;

(*b*) aircraft and all matters connected therewith; and

(*c*) inland waterways, to an extent to be declared by rule made by the Governor-General in Council or by or under legislation by the Indian legislature.

6. Shipping and navigation, including shipping and navigation on inland waterways in so far as declared to be a central subject in accordance with entry 5 (*c*).

7. Light-houses (including their approaches) beacons, lightships and buoys.

8. Port quarantine and marine hospitals.

9. Ports declared to be major ports by rule made by the Governor-General in Council or by or under legislation by the Indian legislature.

10. Posts, telegraph and telephones, including wireless installations.

11. Customs, cotton excise duties, income-tax, salt, and other sources of all-India revenues.

12. Currency and coinage.

13. Public debt of India.

14. Savings Banks.

15. The Indian Audit Department and excluded Audit Departments, as defined in rules framed under section 96-D (1) of the Act.

16. Civil law, including laws regarding status, property, civil rights and liabilities, and civil procedure.

17. Commerce, including banking and insurance.

18. Trading companies and other associations.

19. Control of production, supply and distribution of any articles in respect of which control by a central authority is declared by rule made by the Governor-General in Council or by or under legislation by the Indian legislature to be essential in the public interest.

20. Development of industries, in cases where such development by a central authority is declared by order of the Governor-General in Council, made after consultation with the local Government or local Governments concerned expedient in the public interest.

21. Control of cultivation and manufacture of opium, and sale of opium for export.

22. Stores and stationery, both imported and indigenous, required for Imperial Departments.

23. Control of petroleum and explosives.

24. Geological survey.

25. Control of mineral development, in so far as such control is reserved to the Governor-General in Council under rules made or sanctioned by the Secretary of State, and regulation of mines.

26. Botanical Survey.

27. Inventions and designs.

28. Copyright.

29. Emigration from, and immigration into, British India, and inter-provincial migration.

30. Criminal law, including criminal procedure.

31. Central police organisation.

32. Control of arms and ammunition.

33. Central agencies and institutions for research (including observatories), and for professional or technical training or promotion of special studies.

34. Ecclesiastical administration including European cemeteries.

35. Survey of India.

36. Archæology.

37. Zoological Survey.

38. Meteorology.

39. Census and statistics.

40. All-India services.

41. Legislation in regard to any provincial subject in so far as such subject is in Part II of this Schedule stated to be subject to legislation by the Indian legislature, and any powers relating to such subject reserved by legislation to the Governor-General in Council.

42. Territorial changes, other than inter-provincial, and declaration of law in connection therewith.

43. Regulation of ceremonial, titles, orders, precedence, and civil uniform.

44. Immovable property acquired by, and maintained at the cost of, the Governor-General in Council.

45. The Public Service Commission.

GOVERNMENT OF INDIA.

VICEROY AND GOVERNOR-GENERAL OF INDIA.

His Excellency the Right Hon. EDWARD FREDERICK LINDLEY WOOD, Baron IRWIN OF KIRBY UNDERDALE, G.M.S.I., G.M.I.E., *4th April* 1926.

PERSONAL STAFF OF THE GOVERNOR-GENERAL.

Private Secretary.—G. Cunningham, C.I.E., O.B.E., I.C.S.

Asst. Private Secretary.—W. le B.Egerton, I.C.S.

Military Secretary.—Lieut.-Col. C. O. Harvey, C.V.O., C.B.E., M.C.

Personal Asstt. to Military Secretary.—W. H. P. de la Hey.

Comptroller of the Household.—Lt.-Col. W. W. Muir, C.B.E., M.V.O.

Aides-de-Camp.—Major W. P. A. Bradshaw; Captain J. H. Taylor, 5Horse; Capt. J. A. Herbert, R. H. G.; Captain J. A. Lloyd, Grenadier Guards; Lieut. J. B. Gordon-Duff, Rifle Brigade; Captain A. G. S. Alexander, 21st C. I. H.; Lieut. F. G. W. Jackson, R. H. G.; Hony Lt. Jafar Husain, G. G. G. B., and Risaldar-Major Shaikh Faiz-ud-din, 9 R. Horse.

Surgeon.—Lt.-Col. H. H. Thornburn, C.I.E., I.M.S.

Honorary Aides-de-Camp.—Lieut. Col. D. Douglas, Chota Nagpur Rifles (A.F.I.); Lt. Col. C. G. Smith, Poona Rifles (A.F.I.); Lt. Colonel G. A. Bambridge, 11th Brigade. R. A. (A.F.I.); Capt. Sir Edward J. Headlam, Kt., C.S.I., SC.M.G., D.S.O., R.I.M.; Col. D.S. Mackay, East Coast Battalion (A.F.I.); Lt. Col. N. L. Inkson, G. I. P. Railway R. (A.F.I.); Lt. Col. T. R. Neely, B. N. R. (A.F.I.); Lt. Col. T. Martin-Jones, Buc. Railway Bn. (A.F.I.); Lt. Col. B. Leicester, A. I. R. O.; Lt. Col. H. C. Manders, Assam Valley, L. H. (A.F.I.); Lt. Col. G. S. Bocquet, C.I.E., E.B.R. Bn (A.F.I.); Lt. Col. L. B. Grant, Simla Rifles (A.F.I.); Colonel Commandant Sardar Bahadur Daud Khan, Alwar Partap Paltan; Lt. Colonel Sardar Bahadur Nand Singh, I.O.M., Commandant, Faridkot State Forces; Colonel Bachan Singh Bahadur, Commandant, Nabha Akal Infantry; Lt.-Col. Sardar Singji Bahadur, Commandant, Bhavnagar Lancers; Hon. Captain Sardar Bahadur Mit Singh, I.O.M., late 53rd Sikhs, F. F.; Risaldar Major Bahadur Karm Singh, I.D.S.M., late 13th D. C. Lancers; Hony Capt. Sardar Bahadur Muhi-ud-din Khan, C.I.E., late 31st D. S. O. Lancers; Hon. Captain Sardar Bahadur Dalpat Singh, I.O.M., late 9th Jat Rifles; and Hon. Capt. Sardar Bahadur Gulab Shah, late 10th Baluch Rifles.

COUNCIL.

Ordinary Members—

His Excellency Field-Marshal Sir William Birdwood, Bart., G.C.B., G.C.M.G., K.C.S.I., C.I.E., D.S.O., Commander-in-Chief in India (Army).

Sir George Ernest Schuster, K.C.M.G., (Finance).

Khan Bahadur Sir Mahomed Habibullah Saheb Bahadur, K.C.I.E. (Education, Health and Lands).

Sir George Rainy, K.C.I.E., C.S.I., (Railways, Commerce and Ecclesiastical).

Sir Bhupendra Nath Mitra, M.A., K.C.I.E., C.B.E. (Industries and Labour).

James Crerar, C.S.I., C.I.E., I.C.S. (Home).

Sir Brijendra Lal Mitter, Kt., (Law).

SECRETARIAT.

DEPARTMENT OF EDUCATION, HEALTH AND LANDS.

Secretary, G. S. Bajpai, C.I.E., C.B.E., I.C.S.

Deputy Secretary, Ram Chandra,.

Educational Commissioner with the Government of India, R. Littlehailes, C.I.E.

Inspector-General of Forests, A. Rodger, O.B.E., (Dehra Dun).

Asst. Secretary, H. H. Lincoln.

Superintendents, T. McDonnell, H. H. Lincoln. J. H. Green, Ral Sahib L. M. Roy, E. B. Hughes, Dhanpat Rai.

FINANCE DEPARTMENT.

Secretary, The Hon'ble Mr. E. Burdon, C.S.I., C.I.E., I.C.S.

Deputy Secretary, B. Rama Ran, I.C.S.

Under-Secretary, H. Shankar Rao, B.A.

Assistant-Secretary, Sardar Sahib Sital Singh, M.A. M.B.E., I.C.S.

Assistant-Secretaries, Rai Bahadur C. N. Chakraburty, B.A.; V. Narahari Rao, M.A. (*offg.*)

Superintendents, Shah Mohammad, M.A., Bhagwant Kishore, K. Saniiva Row, M.A., J. C. Ghose, O. Johnson, R. Kor, A.K. Chakravarty, M.A. (*offg.*)

Controller of the Currency, H. Denning, I.C.S.

Accountant-General, Central Revenues, G. Kaula.

Auditor-General, Sir Frederic Gauntlett, K.B.E., C.I.E., I.C.S.

Controller, J. E. C. Jukes, C.I.E., I.C.S.

ARMY DEPARTMENT.

Secretary, G. M. Young, I.C.S.

Deputy Secretary, G. R. F. Tottenham, I.C.S.
Establishment Officer, R. Tharle-Hughes, M.B.E.
Director of Military Lands and Cantonments, Colonel R. H. Palin, O.B.E.

Assistant Secretaries, Major A. R. Lumby, C.I.E., W. C. Debenham, M.B.E., E. A. Daniel, Rai Bahadur J. C. Das Gupta (Offg.).

Officer-in-Charge, Medal Distribution, A. P. Bates.

Superintendents, Rai Sahib S. S. Ghosh, Rai Sahib H. D. Ghosh, S. Banerjee (offg.), A. P. West, N. N. Sen and W. G. MacLeod.

CENTRAL BOARD OF REVENUE.

Members. The Hon'ble Mr. A. R. L. Tottenham, C.I.E., I.C.S., and A. H. Lloyd, C.I.E., I.C.S.

Secretary, V. S. Sundaram, B.A.

MILITARY FINANCE BRANCH.

Financial Adviser, A. F. L. Brayne, C.I.E., I.C.S.

Military Accountant-General, Colonel G. W. Ross, D.S.O., I.A.

Deputy Financial Advisers, A. C. Tyndale, M.A., Lt. Col. H. D. Watson, Lt. Col. J. S. Graham, J. C. Crawford, Lt. Col. R. Prince, H. S. Cumber.

Assistant Financial Advisers, Rai Bahadur K. C. Maulk, B.A., H. D. Banerjee, Rai Sahib A. K. Ghosh, B.A., Mr. F. W. Reed, J. R. Hope.

Superintendents, Gauri Shanker, B.A., A. J. Mendes, A. T. Banerjee, Amar Nath, W. E. Morton, and Hakumat Rai.

FOREIGN AND POLITICAL DEPARTMENT.

Secretary, Political, The Hon'ble C. C. Watson, C.S.I., C.I.E.

Secretary, Foreign, Sir Denys de S. Bray, K.C.I.E., C.S.I., C.B.E.

Deputy Secretary Political, Lt. Col. W. G. Neale.
Deputy Secretary, Foreign, J. G. Acheson.
Under-Secretary, Major P. Gainsford.
Assistant Secretary, E. Bertram Higgs, M.B.E., (on leave).

Assistant Secretary, J. W. S. Inglis, I.S.O.
Attache, Khan Sahib Mohd. Ghias-ud-Din.
Military Adviser-in-Chief, Indian State Forces, Major-General G. A. H. Beatty, C.B., C.S.I., C.M.G., D.S.O.

Staff Officer to the Military Adviser-in-Chief, Indian State Forces, Major W. E. Beazley, M.C.

Superintendents, F. S. Hosley, C. H. Harcourt (on leave), M. Smith, R. S. Budd, G. G. Bladen-Taylor, G. M. Coates, J. R. Rodgers, J. Piner, E. A. Reid, E. C. Otto, E. A. Hill (on leave), Rai Bahadur S. C. Biswas, G. A. Heron.

HOME DEPARTMENT.

Secretary, H. G. Haig, C.I.E., I.C.S.

Joint Secretary, J. A. Shillidy, I.C.S.

Deputy Secretary, J. D. V. Hodge, I.C.S.

Under Secretary, K. R. Menon, I.C.S.

Assistant Secretary, E. H. Brandon, U. C. Stuart.

Superintendents, T. P. Roy, J. C. McDermott, W. D'Almeida, Narendra Nath Banarjee, F. H. T. Ward, W. B. Staggs (on leave), E. S. Keymer, E. H. Frost, P. Sinha.

DIRECTOR, PUBLIC INFORMATION.

Director, J. Coatman, J.P.

DEPARTMENT OF INDUSTRIES AND LABOUR.

Secretary, A. G. Clow, M.A., C.I.E., I.C.S.

Deputy Secretary, S. Lall, I.C.S.

Under Secretary, Tin Tut, M.A., Bar-at-law, I.C.S.
Assistant Secretary, Rai Bahadur S. K. Benerji.

Deputy Secretary, (Public Works Branch) and Offg. Consulting Engineer to the Government of India, D. G. Harris, C.I.E., Dip, Ing. Zuricho, M.I.E. (*Ind.*).

Assistant Secretary, W. R. Chambers, V.D.

Superintendents, Banerjee, Rai Sahib Chand, B.A., A. M. Price, Rai Sahib Pdt. Gauri Shankar, Rai Sahib Dipchand, C. A. B. Watts, B. C. Tawaktey (offg.) M.A., Khan Sahib Feroz Din. (Temp.); Barkat Rai (Offg.).

Superintending Engineer, Simla Imperial Circle, A. Brebner, B.SC., C.I.E.

POST AND TELEGRAPH DEPARTMENT.

Director-General, H. A. Sams, C.I.E., I.C.S.

(RAILWAY BOARD) RAILWAY DEPARTMENT.

Chief Commissioner, Sir Austen Hadow, Kt., C.V.O.

Financial Commissioner, Mr. A. A. L. Parsons, C.I.E., I.C.S.

Member, Mr. P. C. Sheridan, C.M. G.,

Member, T. G. Russell.

Director of Establishment, Mr. J. C. Highet, F.C.H.

Director, Civil Engineering, Mr. A. Lines.

Director, Mechanical Engineering, Mr. A. J. Chase, O.B.E.

Director of Traffic, Mr. J. H. Chase.

Director of Finance, P. R. Rau.

Secretary, Mr. P. H. Maflin, O.B.E., M.C.

Deputy Secretary, Mr. I. T. C. Pringle.

Deputy Director, Programme, Mr. J. F. Blackwood.

Deputy Director, Stores, Mr. R. C. Case

Deputy Director, Statistics, Mr. B. Moody.

Deputy Director, Finance, B. deLonge.

Assistant Director, Statistics, Mr. Gopal Nath.

Timber Advisory Officer, Mr. W. A. Bailey, I.F.S.

Chief Superintendent, Mr. E. C. Rundlett
Technical Officer, Mr. F. E. Cole.

Officers on Special Duty, Mr. E. Ingoldby, Mr. A. M. Hayman, I.F.S. and J. Kaul.

LEGISLATIVE DEPARTMENT.

Secretary, L. Graham, C.I.E., I.C.S.

Joint Secretary and Draftsman, W. T. M. Wright, C.I.E., I.C.S.

Additional Joint Secretary, S. C. Gupta, Barrister-at-law (on leave); G. H. Spence, I.C.S. (offg.).

Deputy Secretary, G. H. Spence, I.C.S.

Assistant Secretary C. H. F. Pereira.

Solicitor to the Government of India, T. E. T. Upton,

Asstt. Solicitor to the Government of India, S. Webb-Johnson.

2nd Assistant Solicitor to the Government of India, S. Mushran, M.A., Bar-at-Law.

Superintendents, D. D. Baird, Rai Sahib D. Dutt, F. A. Thorpe, C. Govindan Nair.
Attache.—G. B. De.

DEPARTMENT OF COMMERCE.

Secretary, The Hon. Sir Geoffrey Corbett, K.B.E, C.I.E., I.C.S.

Joint Secretary, J. A. Woodhead, I.C.S.

Assistant Secretary, Rai Bahadur S. N. Banerjee, B.A.

Asst. Secretary, Rai Sahib L. Sen, B.A.

Superintendents, E. J. Sealy, Ladli Prasad, B.A., G. Corley-Smith and A. N. Puri, B.A., LL.B.

Actuary to the Government of India, H. G. W. Meikle, F.F.A.

NORTHERN INDIA SALT REVENUE.

Commissioner, A. L. Hoyle.

Officiating Commissioner, F. D. Reid.

General Manager, A. D. C. McIver.

Assistant Commissioners, C. H. Pitt, I. E. Peterson, D. M. Smith and A. G. O. Howard.

SURVEY DEPARTMENT.

Surveyor-General of India, Col.-Comdt. E. A. Tady, R.E.

GEOLOGICAL SURVEY.

Director, Sir Edwin H. Pascoe, Kt., M.A., SC.D., D.SC., F.G.S., F.A.S.B.

Superintendents, L. L. Fermor, O.B.E., A.R.S.M., D.Sc. (Lond.), F.G.S., F.A.S.B.; G. E. Pilgrim, D.SC., F.G.S., F.A.S.B.; G. H. Tipper, M.A., F.G.S., F.A.S.B., G. de P. Cotter, B.A.; J. C. Brown, O.B.E., D.SC., F.A.S.B.; and H. C. Jones, A.R.S.M., A.R.C.S. F.G.S.

Chemist, W. A. K. Christie, B.Sc, Ph.D.S.B.

BOTANICAL SURVEY.

Director, C. C. Calder, B.Sc. (Agr.), F.G.S., Dr. S. N. Bal, Ph. D., *Curator, Industrial Section, Indian Museum;* P. T. Russell, *Superintendent,* Cinchona Cultivation in Burma.

ARCHÆOLOGICAL SURVEY.

Director-General of Archaeology, Sir J.H. Marshall KT., C.I.E., M.A., LL.D., F. S. A.; *Deputy Director-General,* J.F. Blakiston; *Joint Deputy Director-General,* Daya Ram Sahani, M.A.; *Superintendent, Eastern Circle,* K. N. Dikshit, M.A.; *Superintendent, Western Circle,* Ganesh Chandra, *Superintendent, Southern Circle,* A. H. Longhurst; *Superintendent, Northern Circle,* B. L. Dhama and T. A. Otto; *Superintendent, Central Circle,* J. A. Page; *Superintendent, Burma,* C. Duroiselle, M.A., I.S.O.; *Superintendent, Frontier Circle,* Khan Bahadur Maulvi Zafar Hasan.

MISCELLANEOUS APPOINTMENTS.

Director-General, Indian Medical Service, The Hon. Major-General T. H. Symons, C.S.I., O.B.E., K.H.S., I.M.S.

Public Health Commissioner with the Government of India, Lt.-Col. J. D. Graham, C.I.E., I.M.S.
Deputy Director-General, Indian Medical Service, Lt.-Col. J. K. S. Flemings, O.B.E., I.M.S.

Assistant Director-General, Indian Medical Service, Lt. Col. J. B. Lapsley, M.C., I.M.S.

Director, Central Research Institute, Kasauli, Col. S. R. Christophers, C.I.E., O.B.E., I.M.S., (on leave); Lt. Col. J. Cunningham, C.I.E., I.M.S.

Assistant to Director, Central Research Institute, Kasauli, Major L. A. P. Anderson, M.A., M.D. and Capt. G. C. Maitra.

Director, Kodaikanal and Madras Observatories, T. Royds., D.Sc.

Meteorologist. Bombay Observatory, S. K. Banerji, D.Sc.

Librarian, Imperial Library, Calcutta, J. A. Chapman.

Agricultural Adviser and Director of the Agricultural Research Institute, Pusa, D. Clouston, M.A., C.I.E.

Director, Zoological Survey of India, Indian Museum, Lt. Colonel R. B. Seymour Sewell, I.M.S., M.A.

Controller of Printing, Stationery and Stamps, E. E. Coombs, O.B.E.

Master, Security Printing, Nasik Road, Lt.-Col. Sir George Willis, Kt., C.I.E., M.V.O., R.E., M.I.M.E.

Director, Central Intelligence, D. Petrie, C.I.E., C.V.O, C.B.E.

Director-General of Commercial Intelligence and Statistics, D. B. Meek.

Deputy Director-General of Commercial Intelligence and Statistics, M. L. J. MacIver, I.C.S.

Controller of Patents and Designs, K. Rama Pai. M.A.

GOVERNORS-GENERAL OF FORT WILLIAM IN BENGAL.

Name.	Assumed charge. of office.
Warren Hastings ..	..20 Oct. 1774
Sir John Macpherson, Bart.	.. 8 Feb. 1785
Earl Cornwallis, K.G. (*a*)	..12 Sep. 1786
Sir John Shore, Bart. (*b*)	..28 Oct. 1793

(*a*) Created Marquess Cornwallis, 15 Aug. 1792

(*b*) Afterwards (by creation) Baron Teignmout.

Lieut.-General the Hon. Sir Alfred Clarke, K.C.B. (*offg.*)	..17 Mar. 1798
The Earl of Mornington, P.C. (*c*)	18 May 1798
The Marques Cornwallis, K. G. (2nd time)	..30 July 1805
Captain L. A. P. Anderson, Sir George H. Barlow, Bart. ..	..10 Oct. 1805
Lord Minto, P.C. (*d*) ..	..31 July 1807
The Earl of Moira, K.G., P.C. (*e*)	4 Oct. 1813
John Adam (*offg.*) ..	..13 Jan. 1823
Lord Amherst P.C. (*f*) ..	.. 1 Aug. 1823
William Butterworth Bayley (*offg.*)	13 Mar. 1828
Lord William Cavendish Bentinck, G.C.B., G.C.H., P.C. ..	.. 4 July 1828

(*c*) Created Marquess Wellesley, 2 Dec. 1799

(*d*) Created Earl of Minto. 24 Feb. 1813.

(*e*) Created Marquess of Hastings, 2 Dec. 1816.

(*f*) Created Earl Amherst, 2 Dec. 1826.

GOVERNORS-GENERAL OF INDIA.

Name.	Assumed charge of office.
Lord William Cavendish Bentinck, G.C.B., G.C.H., P.C. ..	..14 Nov. 1834
Sir Charles Metcalfe, Bart. (*a*) (*offg.*)	20 March 1835
Lord Auckland, G.C.B., P.C. (*b*)	4 March 1836
Lord Ellenborough, P.C. (*c*)	..28 Feb. 1842
William Wilberforce Bird (*offg.*)	15 June 1844
The Right Hon. Sir Henry Hardinge, G.C.B. (*d*)	..23 July 1844
The Earl of Dalhousie, P.C. (*e*)	12 Jan. 1848
Viscount Canning, P.C. (*f*)	..29 Feb. 1856

(*a*) Afterwards (by creation) Baron Metcalfe.

(*b*) Created Earl of Auckland, 21 Dec., 1839.

(*c*) Afterwards (by creation) Earl of Ellenborough.

(*d*) Created Viscount Hardinge, 2 May 1846.

(*e*) Created Marquess of Dalhousie, 25 Aug. 1849.

(*f*) Afterwards (by creation) Earl Canning.

NOTE.—The Governor-General ceased to be the direct Head of the Bengal Government from the 1st May, 1854, when the first Lieutenant-Governor assumed office. On 1st April 1912, Bengal was placed under a separate Governor and the appointment of Lieutenant-Governor was abolished.

VICEROYS AND GOVERNORS-GENERAL OF INDIA.

Name.	Assumed charge of office.
Viscount Canning, P.C. (*a*)	.. 1 Nov. 1858
The Earl of Elgin and Kincardine, KT., G.C.B., P.C. ..	12 March 1862
Major-General Sir Robert Napier, K.C.B. (*b*) (*offg.*) ..	..21 Nov. 1863
Colonel Sir William T. Denison, K.C.B. (*offg.*)	.. 2 Dec. 1863
The Right Hon. Sir John Lawrence, Bart, G.C.B., K.C.S.I. (*c*)	..12 Jan. 1864
The Earl of Mayo, K.P. ..	..12 Jan. 1869
John Strachey (*d*) (*offg.*)	.. 9 Feb. 1872
Lord Napier of Merchustoun, KT. (*e*) (*offg.*)	..23 Feb. 1872
Lord Northbrook, P.C. (*h*)	.. 3 May 1872
Lord Lytton, G.C.B. (*g*) ..	..12 Apl. 1876
The Marquess of Ripon, K.G., P.C.	8 June 1880
The Earl of Dufferin, K.P., G.C.B., G.C.M.G., P.C. (*i*) ..	..13 Dec. 1884
The Marquess of Lansdowne, G. C. M. G.	..10 Dec. 1888
The Earl of Elgin and Kincardine, P. C.	..27 Jan. 1894
Baron Curzon of Kedleston, P.C.	6 Jan. 1899
Baron Ampthill (*offg.*) ..	..30 Apl. 1904
Baron Curzon of Kedleston P.C. (i)	13 Dec. 1904
The Earl of Minto, K. G., P.C., G. C. M. G.	..18 Nov. 1905
Baron Hardinge of Penshurst. P. C., G.C.B., G.C.M.G., G.C.V.O., I.S.O. (*j*)	23 Nov. 1910
Lord Chelmsford..	Apl. 1916
Lord Reading	Apl. 1921
Lord Irwin..	Apl. 1926

(*a*) Created Earl Canning, 21 May 1859.

(*b*) Afterwards (by creation) Baron Napier of Magdala.

(*c*) Afterwards (by creation) Baron Lawrence.

(*d*) Afterwards Sir John Strachey, G.C.S.I., C.I.E.

(*e*) Afterwards (by creation) Baron Napier of Ettrick.

(*f*) Afterwards (by creation) Earl of Northbrook.

(*g*) Created Earl of Lytton, 28 April 1880.

(*h*) Created Marquis of Dufferin and Ava 12 Nov. 1888.

(*i*) Created an Earl .. .. June 1911

(*j*) During tenure of office, the Viceroy is Grand Master and First and Principal Knight of the two Indian Orders (G.M.S.I., and G.M.I.E.). On quiting office, he becomes G.C.S.I. and G.C.I.E.; with the date of his assumption of the Viceroyalty.

The gradual evolution of the Indian constitution is fully traced in the article on "The Government of India," which precedes this; so also are the great changes made by the Reform Act of 1919. For the purposes of easy reference the powers of the Legislatures, as well as the special powers reserved to the Governor-General for the discharge of his responsibilities, which are fully set out in the Act, are reproduced below:—

21. (1) Every Council of State shall continue for five years, and every Legislative Assembly for three years, from its first meeting:

Provided that—

(*a*) either chamber of the legislature may be sooner dissolved by the Governor-General and

(*b*) any such period may be extended by the Governor-General if in special circumstances, he so thinks fit; and

(*c*) after the dissolution of either chamber the Governor-General shall appoint a date not more than six months, or with the sanction of the Secretary of State, not more than nine months after the date of dissolution for the next session of that chamber.

22. (1) An official shall not be qualified for election as a member of either chamber of the Indian legislature, and, if any non-official member of either chamber accepts office in the service of the Crown in India his seat in that chamber shall become vacant.

(4) Every member of the Governor-General's Executive Council shall be nominated as a member of one chamber of the Indian legislature, and shall have the right of attending in and addressing the other chamber, but shall not be a member of both chambers.

24. (3) If any Bill which has been passed by one chamber is not, within six months after the passage of the Bill by that chamber, passed by the other chamber either without amendments or with such amendments as may be agreed to by the two chambers, the Governor-General may in his discretion refer the matter for decision to a joint sitting of both chambers. Provided that standing orders made under this section may provide for meetings of members of both chambers appointed for the purpose, in order to discuss any difference of opinion which has arisen between the two chambers.

(4) Without prejudice to the powers of the Governor-General under section sixty-eight of the principal Act, the Governor-General may where a Bill has been passed by both chambers of the Indian legislature, return the Bill for reconsideration by either chambers.

(7) Subject to the rules and standing orders affecting the chamber, there shall be freedom of speech in both chambers of the Indian legislature. No person shall be liable to any proceeding in any court by reason of his speech or vote in either chamber, or by reason of anything contained in any official report of the proceedings of either chamber.

25. Indian Budget:—(1) The estimated annual expenditure and revenue of the Governor-General in Council shall be laid in the form of a statement before both chambers of the Indian legislature in each year.

(2) No proposal for the appropriation of any revenue or moneys for any purpose shall be made except on the recommendation of the Governor-General.

(3) The proposals of the Governor-General in Council for the appropriation of revenue or moneys relating to the following heads of expenditure shall not be submitted to the vote of the legislative assembly, nor shall they be open to discussion by either chamber at the time when the annual statement is under consideration, unless the Governor-General otherwise directs—

(*i*) interest and sinking fund charges on loans and

(*ii*) expenditure of which the amount is prescribed by or under any law; and

(*iii*) salaries and pensions of persons appointed by or with the approval of His Majesty or by the Secretary of State in Council; and

(*iv*) salaries of chief commissioners and judicial commissioners; and

(*v*) expenditure classified by the order of the Governor-General in Council as—

(*a*) ecclesiastical;
(*b*) political;
(*c*) defence.

(4) If any question arises whether any proposed appropriation of revenue of money, does or does not relate to the above heads the decision of the Governor-General on the question shall be final.

(5) The proposals of the Governor-General in Council for the appropriation of revenue or moneys relating to heads or expenditure not specified in the above heads shall be submitted to the vote of the legislative assembly in the form of demands for grants.

(6) The legislative assembly may assent or refuse its assent to any demand or may reduce the amount referred to in any demand by a reduction of the whole grant.

(7) The demands as voted by the legislative assembly shall be submitted to the Governor-General in Council, who shall, if he declares that he is satisfied that any demand which has been refused by the legislative assembly is essential to the discharge of his responsibilities, act as if it had been assented to, notwithstanding the withholding of such assent or the reduction of the amount therein referred to, by the legislative assembly.

(8) Notwithstanding anything in this section the Governor-General shall have power, in cases of emergency, to authorise such expenditure as may, in his opinion, be necessary for the safety or tranquillity of British India or any part thereof.

26. Emergency Powers:—(1) Where either chamber of the Indian legislature refuses leave to introduce or fails to pass in a form recommended by the Governor-General any Bill, the Governor-General may certify that the passage of the Bill is essential for the safety, tranquillity or interests of British India or any part thereof, and thereupon—

(*a*) if the Bill has already been passed by the other chamber, the Bill shall, on signature by the Governor-General, notwithstanding that it has not been consented to by both chambers, forthwith become an Act of the Indian legislature in the form of the Bill as originally introduced or proposed to be introduced in the Indian legislature, or (as the case

may be) in the form recommended by the Governor-General ; and

(*b*) if the Bill has not already been so passed, the Bill shall be laid before the other chamber, and, if consented to by that chamber in the form recommended by the Governor-General, shall become an Act as aforesaid on the signification of the Governor-General's assent, or, if not so consented to shall, on signature by the Governor-General, become an Act as aforesaid.

(2) Every such Act shall be expressed to be made by the Governor-General and shall, as soon as practicable after being made, be laid before both Houses of Parliament, and shall not have effect until it has received His Majesty's assent, and shall not be presented for His Majesty's assent until copies thereof have been laid before each House of Parliament for not less than eight days on which that House has sat; and upon the signification of such assent by His Majesty in Council and the notification thereof by the Governor-General, the Act shall have the same force and effect as an Act passed by the Indian legislature and duly assented to:

Provided that, where in the opinion of the Governor-General a state of emergency exists which justifies such action, the Governor-General may direct that any such Act shall come into operation forthwith, and thereupon the Act shall have such force and effect as aforesaid, subject, however, to disallowance by His Majesty in Council.

27. Supplemental provisions:—(1) In addition to the measures referred to in sub-section (2) of section sixty-seven of the principal Act, as requiring the previous sanction of the Governor-General it shall not be lawful without such previous sanction to introduce at any meeting of either chamber of the Indian legislature any measure—

(*a*) regulating any provincial subject, or any part of a provincial subject, which has not been declared by rules under the principal Act to be subject to legislation by the Indian legislature;

(*b*) repealing or amending any Act of a local legislature;

(*c*) repealing or amending any Act or ordinance made by the Governor-General.

(2) Where in either chamber of the Indian legislature any Bill has been introduced or is proposed to be introduced, or any amendment to a Bill is moved, or proposed to be moved, the Governor-General may certify that the Bill or any clause of it, or the amendment affects the safety or tranquillity of British India, or any part thereof, and may direct that no proceedings, or that no further proceedings, shall be taken by the chamber in relation to the Bill, clause, or amendment and effect shall be given to such direction.

THE LEGISLATIVE ASSEMBLY.

President:—The Honourable Mr. V. J. Patel.

Marshall:—Capt. Suraj Singh Bahadur, I.O.M.

A. Elected Members (104).

Constituency.	Name.
Madras City (Non-Muhammadan Urban). ..	Mr. Seshadri Iyengar Srinivasa Iyengar.
Ganjam *cum* Vizagapatam (Non-Muhammadan Rural).	Mr. Varahagiri Venkata Jogiah.
Godavari *cum* Kistna (Non-Muhammadan Rural).	Mr. T. Prakasam.
Guntur *cum* Nellore (Non-Muhammadan Rural).	Mr. Battena Perumalla Nayudu.
Madras ceded districts and Chittoor (Non-Muhammadan Rural).	Mr. Chetluru Doraiswamy Ayyangar.
Salem and Coimbatore *cum* North Arcot (Non-Muhammadan Rural).	Mr. R. K. Shanmukham Chetty.
South Arcot *cum* Chingleput (Non-Muhammadan Rural).	Mr. M. K. Acharya.
Tanjore *cum* Trichinopoly (Non-Muhammadan Rural).	Mr. A. Rangaswami Iyengar.
Madura and Ramnad *cum* Tinnevelly (Non-Muhammadan Rural).	Mr. M. S. Sesha Iyengar.
West Coast and Nilgiris (Non-Muhammadan Rural).	Mr. G. Sarvotam Rao.
North Madras (Muhammadan)	Maulana Md. Abdul Latif Sahib Bahadur Farookhi.

Constituency.	Name.
South Madras (Muhammadan)	Moulvi Sayyid Murtuza Saheb Bahadur.
West Coast and Nilgiris (Muhammadan). ..	Mr. Khan Bahadur Haji Abdullah Haji Kassim.
Madras (European)	Mr. William Alexander.
Madras Landholders	Mr. K. V. Rangaswamy Ayyangar.
Madras Indian Commerce	Mr. Vidya Sagar Pandya.
Bombay City (Non-Muhammadan Urban) ..	Mr. M. R. Jayakar, M.A., LL.B.
Ditto. ..	Mr. Jamnadas Madhavji Metha.
Sind (Non-Muhammadan Rural)	Diwan Lalchand Navalrai.
Bombay Northern Division (Non-Muhammadan Rural).	Mr. Vithalbhai J. Patel.*
Bombay Central Division (Muhammadan Rural).**	Mr. Fazal Ibrahim Rahimtulla.
Bombay Central Division (Non-Muhammadan Rural).	Mr. Narsinha Chintaman Kelkar, B.A., LL.B.
Ditto. ..	Mr. Sarabhai Nemchand Haji.
Bombay Southern Division (Non-Muhammadan Rural).	Mr. Dattatraya Venkatesh Belvi.
Bombay City (Muhammadan Urban)	Mr. Mahomed Ali Jinnah.
Sind (Muhammadan Rural)	Seth Haji Abdulla Haroon.
Ditto.	Wadero Mohomed Panah Ghulam Kadirkhan Dakhan.
Bombay (European)	Mr. E. F. Sykes, M.I.C.E.
Ditto.	Mr. Hugh Golding Cocke.
The Indian Merchants' Chamber and Bureau (Indian Commerce).	Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E.,
Sind Jahagirdars and Zemindars (Landholders)	Wadero Wahidbaksh Illahibaksh Bhuto.
Bombay Millowners' Association (Indian Commerce). **	Sir Victor Sassoon, Bart.
Calcutta (Non-Muhammadan Urban).	Mr. Nirmal Chunder Chunder.
Calcutta Suburbs (Non-Muhammadan Urban)..	Mr. T. C. Goswami.
Burdwan Division (Non-Muhammadan Rural)...	Mr. Amarnath Dutt.
Presidency Division (Non-Muhammadan Rural).	Mr. Bhabendra Chandra Roy.
Dacca Division (Non-Muhammadan Rural). ..	Mr. Kshitish Chandra Neogy.
Chittagong and Rajshahi Divisions (Non-Muhammadan Rural).	Mr. S. C. Mitra.
Calcutta and Suburbs (Muhammadan Urban) ..	Mr. Mohamed Rafique.
Burdwan and Presidency Divisions (Muhammadan Rural).	Dr. A. Suhrawardy.
Dacca Division (Muhammadan Rural)	Mr. A. H. Ghuznavi.
Do. do.	Haji Choudhary Mohamad Ismail Khan.
Chittagong Division (Muhammadan Rural) ..	Mr. Md. Anwarul Azim.
Rajshahi Division (Muhammadan Rural) ..	Mr. Kabeerud-Din Ahmed.

* Elected President. ** Entitled to representation in rotation.

Constituency.	Name.
Bengal (European)	Mr. W. Arthur Moore, M.B.E.
Do.	Sir Darcy Lindsay, Kt., C.B.E.
Do.	Col. J. D. Crawford, D.S.O., M.C.
Bengal Landholders	Mr. Dhirendra Kanta Lahiri Chaudhury.
Marwari Association (Indian Commerce) ..	Rai Bahadur Tarit Bhushan Roy.
Cities of the United Provinces (Non-Muhammadan Urban).	Pandit Motilal Nehru.
Meerut Division (Non-Muhammadan Rural)..	Chaudhri Mukhtar Singh.
Agra Division (Non-Muhammadan Rural) ..	Pandit Hirday Nath Kunzru.
Rohilkund and Kumaon Division (Non-Muhammadan Rural).	Mr. C. S. Ranga Iyer.
Allahabad and Jhansi Divisions (Non-Muhammadan Rural).	Pandit Madan Mohan Malaviya.
Benares and Gorakhpur Divisions (Non-Muhammadan Rural).	Mr. Ghanshyam Das Birla.
Lucknow Division (Non-Muhammadan Rural) .	Munshi Iswar Saran.
Fyzabad Division (Non-Muhammadan Rural).	Kumar Rananjaya Singh.
Cities of the United Provinces (Muhammadan Urban).	Tasadduq Ahmad Khan Shervani.
Meerut Division (Muhammadan Rural) ..	Mr. Muhammad Ismail Khan.
Agra Division (Muhammadan Rural)	Dr. L. K. Hyder.
Rohilkund and Kumaon Divisions (Muhammadan Rural).	Maulvi Muhammad Yakub.
United Provinces Southern Divisions (Muhammadan Rural).	Mr. Yusuf Imam.
Lucknow and Fyzabad Divisions (Muhammadan Rural).	Mr. Rafi Ahmad Kidwai.
United Provinces (European)	Mr. T. Gavin Jones.
United Provinces Landholders	Lala Triloki Nath.
Ambala Division (Non-Muhammadan)... ..	Pandit Thakar Das Bhargava.
Jullundur Division (Non-Muhammadan) ..	Vaccant.
West Punjab (Non-Muhammadan)	Diwan Chaman Lal.
East Punjab (Muhammadan)	Mr. Abdul Haye.
East Central Punjab (Muhammadan)	Nawab Sir Zulfiqar Ali Khan, Kt., C.S.I.
West Central Punjab (Muhammadan). . ..	Mian Muhammad Shah Nawaz.
North Punjab (Muhammadan)	Raja Ghazanfar Ali Khan.
North-West Punjab (Muhammadan)	Sayyad Hussain Shah.
South-West Punjab (Muhammadan)	Makhdum Syed Raja Bakhsh Shah.
East Punjab (Sikh)	Sardar Kartar Singh.
West Punjab (Sikh)	Sardar Gulab Singh.
Punjab Landholders	Lt. Sardar Muhammad Nawaz Khan.
Tirhut Division (Non-Muhammadan)	Mr. Narayan Prasad Singh.
Do. do.	Mr. Gaya Prasad Singh.

Province or body represented.	Name.
Orissa Division (Non-Muhammadan)	Pundit Nilakantha Das.
Do. do.	Mr. Bhabanananda Das.
Patna *cum* Shahabad (Non--Muhammadan) ..	Mr. Rajivarandan P. Sinha.
Gaya *cum* Monghyr (Non-Muhammadan) ..	Mr. K. Siddheshwar Prasad Sinha.
Bhagalpur, Purnea and the Santhal Parganas (Non-Muhammadan).	Mr. Ganganand Sinha.
Chota Nagpur Division (Non-Muhammadan) ..	Mr. Ram Narayan Singh.
Patna and Chota Nagpur *cum* Orissa (Muhammadan).	Khan Bahadur Sarfaraz Husain Khan.
Bhagalpur Division (Muhammadan)	Moulvi Badi-uz-zaman.
Tirhut Division (Muhammadan)	Maulvi Muhammad Shafee.
Bihar and Orissa Landholders	Raja Raghunandan Parshad Singh.
Nagpur Division (Non-Muhammadan) ..	Dr. B. S. Moonje.
Central Provinces Hindi Divisions (Non-Muhammadan).	Sir Hari Singh Gour, Kt.
Do. do.	Mr. Dwarka Prasad Misra.
Central Provinces (Muhammadan)	Dr. Abdul Qadir Siddiq.
Central Provinces Landholders	Seth Jamnadass.
Assam Valley (Non-Muhammadan)	Srijut Tarum Ram Phookun.
Surma Valley *cum* Shillong (Non-Muhammadan)	Mr. Srischandra Dutta.
Assam (Muhammadan)	Maulvi Abdul Matin Chaudhury.
Assam (European)	Mr. T. A. Chalmers, C.S.I.
Burma (Non-European)	Jehangir K. Munshi.
Do.	U. Tok Kyi.
Do.	U. Hla Tun Pru.
Burma (European)	Mr. W. Stenhouse Lamb.
Delhi (General)	Lala Rang Bihari Lal.
Ajmer-Merwara (General)	Rai Sahib Har Bilas Sarda.

B. – NOMINATED MEMBERS (EXCLUDING THE PRESIDENT) (40).

OFFICIAL MEMBERS (25)

Government of India	The Honourable Sir George Ernest Schuster. K.C.M.G.
Do.	The Honourable Sir Bhupendra Nath Mitra, K.C.I.E., C.B.E.
Do.	The Hon. Mr. James Crerar, C.S.I., C.I.E.
Do.	The Hon. Sir George Rainy, K.C.I.E., C.S.I.
Do.	Mr. L. Graham, C.I.E.
Do.	Mr. J. A. Shilliday.
Do.	Mr. G. Mackworth Young.
Do.	Sir. Denys de S. Bray, K.C.I.E., C.S.I., C.B.E.
Do.	Mr. P. G. Rogers, C.I.E.
Do.	Mr. S. Lall.
Do.	Mr. A. A. L. Parsons.
Do.	Mr. G. S. Bajpai, C.I.E., C.B.E.
Do.	Mr. H. Shankar Rau.
Do.	Mr. J. Coatman.
Madras	Mr. E. H. M. Bower.
Do.	Diwan Bahadur T. Raghavayya Pantulu. Garu.

Province or body represented.	Name.
Bombay	Mr. S. M. Bharucha.
Do.	Mr. M. Webb.
Bengal	Mr. Satyendra Nath Roy.
Do.	Khan Bahadur Nasiruddin Ahmad.
United Provinces	Mr. C. M. King, C.I.E.
The Punjab	Khan Bahadur Mian Abdul Azi .
Bihar and Orissa	Rai Bahadur Shyam Narayan Singh, M.B.E.
The Central Provinces	Mr. Ghazanfar Ali Khan, O.B.E.
Assam	Mr. J. Hazlett, C.I.E.
Burma	Mr. A. Stewart, C.I.E.
Berar representative	Mr. Madhao Shrihar Aney.
NON-OFFICIAL MEMBERS (14).	
Bombay	Sardar Sir Bomanji A, Dalal. Kt.
Do.	Mr. Kikabhai Premchand.
Bengal	Mr. S. C. Mukherjee.
Do.	Mr. Keshav Chandra Roy, C.I.E.
The United Provinces	Mr. Md. Yamin Khan.
The Punjab..	Sardar Bahadur Sardar Jowahir Singh, C.I.E.
Do.	Sardar Bahadur Capt. Hira Singh Brar,, M.B.E
Bihar and Orissa	Khan Bahadur Nawabzada Saiyid Ashrafuddin Ahmad, C.I.E.
North-West Frontier Province	Nawab Sir Sahibzada Abdul Qaiyum K.C.I.E.
Indian Christian	Sir James Simpson, Kt.
Anglo-Indian Community	Lieutenant-Colonel H. A. J. Gidney.
Labour interests	Mr. Narayan Malhar Joshi.
Depressed Classes	Rao Bahadur M. C. Rajah.
Associated Chambers of Commerce	Rev. Joshi Chandra Chatterji.

THE COUNCIL OF STATE.

President—The Hon'ble Sir Henry Moncrieff Smith, Kt., C.I.E., I.C.S.

A.—ELECTED MEMBERS (33).

Constituency.	Name.
Madras (Non-Muhammadan)	Diwan Bahadur Sir S. M. Annamalai Chettiyar, Kt.
Do.	Sir C. Sankaran Nair, Kt.
Do.	Mr. V. Ramadas Pantulu.
Do.	Rao Sahib U. Rama Rao.
Madras (Muhammadan)	Syed Muhammad Padshah Saheb Bahadur.
Bombay (Non-Muhammadan)	Mr. Manmohandas Ramji Vora.
Do.	Sir Phiroze C. Sethna, Kt., O. B. E.
Do.	Mr. Ratansi Dharamsi Morarji.
Bombay Presidency (Muhammadan)	Khan Bahadur Sir Ebrahim Haroon Jaffer.
Sind (Muhammadan)	Mr. Ali Baksh Muhammad Hussain.
Bombay Chamber of Commerce	Sir Arthur Henry Froom, Kt.
Bengal (Non-Muhammadan)	Kumar Sankar Roy Choudhuri.
Do.	Mr. Lokenath Mukerjee.
Do.	Mr. Rama Prasad Mukherji.
West Bengal (Muhammadan)	Mr. Mahmood Suhrawardy.
East ,, do.	Khan Bahadur Maulvi Abdul Karim.

Constituency.	Name.
Bengal Chamber of Commerce	Sir George Godfrey, Kt.
United Provinces Central (Non-Muhammadan).	Raja Sir Rampal Singh, K.C.I.E.
United Provinces Northern (Non-Muhammadan)	Munshi Narayan Prasad Ashthana.
United Provinces Southern(Non-Muhammadan)	Raja Moti Chand, C.I.E.
United Provinces West (Muhammadan) ..	Nawab Sir Muhammad Muzammil-ullah Khan, Khan Bahadur, K.C.I.E.
United Provinces East (Muhammadan) ..	Maharajah Sir Muhammad Ail Md. Khan, K.B., K.C.S.I., K.C.I.E., of Mahmudabad.
Punjab (Non-Muhammadan)	Rai Bahadur Lala Ram Saran Das, C.I.E.
Punjab (Sikh)	Sardar Shivdeo Singh Uberoi.
East and West Punjab (Muhammadan) ..	Nawab Sahibzada Sayad Md. Mehar Shah.
Bihar and Orissa (Non-Muhammadan) ..	Maharajadhiraja Sir Rameshawara Singh, G.C.I.E., K.B.E., of Darbhanga.
Do. ..	Anugraha Narayan Sinha.
Do. ..	Mr. Mahendra Prasad.
Bihar and Orissa (Muhammadan)	Shah Muhammad Zubair.
Central Provinces (General)	Seth Govind Das.
Assam (Muhammadan)	Maulvi Golam Mustafa Choudhury.
Burma (General)	Mr. P. C. D. Chari.
Burma Chamber of Commerce	Mr. K. B. Harper.

B.—Nominated Members (26 *excluding the President*).

(*a*) *Official Members* (*not more than* 19 *excluding President*).

Government of India	His Excellency Field Marshal Sir William Birdwood, Bart., G.C.B., G.C.M.G., K.C.S.I., C.I.E., D.S.O.
Do.	Sir Muhammed Habibullah, K.C.S.I., K.C.I.E., Kt.
Do.	Sir Brijendra Lal Mitter, Kt.
Do.	Mr, H. G. Haig, C.I.E.
Do.	Major-General T. H. Symons, C.S.I.
Do.	Mr. Ernest Burdon, C.I.E.
Do.	Sir G. L. Corbett, C.I.E.
Do.	Mr. A. G. Clow, C.I.E.
Do.	Sir John Perronet Thompson, C.S.I.
Do.	Mr. B. J. Glancy, C.S.I., C.I.E.
Madras	Mr. H. A, B. Vernon.
Bombay	Mr. A. M. Macmillan, C.I.E.
Bengal	Mr. K. C. De, C.I.E.
The United Provinces	Khan Bahadur Shaikh Maqbul Hussain, C.I.E
The Punjab	Nawab Malik Mohd. Hayat Khan.
Bihar and Orissa	Mr. D. Weston.

(*b*) *Berar Representative.*

Berar Representative	Mr. Ganesh Srikrishna Khaparde.

(*c*) *Non-Official Members.*

Madras	Mr G. A. Natesan.
Bombay	Sir Dinshah Edulji Wacha, Kt.
Bengal	Prince Afsar-ul Mulk Mirza Md. Akram Hussain Bahadur.
Central Provinces..	Sir Maneckji Byramji Dadabhoy, K.C.I.E.
The United Provinces	Raja Nawab Ali Khan of Akbarpur.
The Punjab (Indian Christian)	Raja Sir Harnam Singh, K.C.I.E.
The Punjab	Sirdar Charanjit Singh.
Do.	Col. Nawab Sir Umar Hayat Khan, K.C.I.E., C.B.E., M.V.O.
North-West Frontier Provinces	Major Nawab Mahomed Akbar Khan, C.I.E., Khan of Hoti.

Administrative Divisions.

Provinces.	No. of Districts.	Area in Square miles.	Population (1921).
Ajmer Merwara..	2	2,711	495,899
Andamans and Nicobars	....	3,143	26,833
Assam	12	52,959	7,598,861
Baluchistan	6	45,804	421,679
Bengal	28	78,412	46,653,177
Bihar and Orissa	21	83,205	33,998,778
Bombay (Presidency)	26	123,064	19,338,586
Bombay	26	75,918	16,005,170
Sind	6	47,066	3,278,493
Aden	....	80	54,923
Burma	41	236,738	13,205,564
Central Provinces and Berar	22	100,345	13,908,514
Coorg	1	1,582	164,459
Delhi	....	....	486,741
Madras	24	141,726	42,322,270
North-West Frontier Province (Districts and administered Territories).	5	16,466	2,247,696
Punjab	29	97,209	20,678,393
United Provinces of Agra & Oudh	48	107,164	45,590,946
Agra	36	83,198	33,420,638
Oudh	12	23,966	12,170,308
Total, British Territory	267	1,097,901	247,138,396

States and Agencies	No. of Districts.	Area in Square miles.	Population (1921).
Baluchistan States	....	86,511	378,999
Baroda State	....	8,099	2,121,875
Bengal States	....	32,773	896,173
Bihar and Orissa	....	....	3,965,431
Bombay States	....	65,761	7,412,341
Central India Agency	....	78,772	9,180,403
Central Provinces States	....	31,188	2,068,482
Assam States	....	....	383,672
Hyderabad State	....	82,698	12,453,627
Kashmir State	....	80,900	3,322,080
Madras States	....	9,969	5,460,029
Cochin State	....	....	979,019
Travancore State	....	....	4,005,849
Mysore State	....	29,444	5,976,660
North-West Frontier Province (Agencies and Tribal areas).	....	....	2,828,055
Punjab States	....	36,532	4,415,401
Rajputana Agency	....	127,541	9,357,012
Sikkim	....	....	81,722
United Provinces States	....	5,079	1,134,824
Total, Native States	....	675,267	71,936,786
Grand Total, India	....	1,773,168	319,075,182

The Bombay Presidency stretches along the west coast of India, from Sind in the North to Kanara in the South. It embraces, with its feudatories and Aden, an area of 187,074 square miles and a population of 26,757,648. Of this total 63,453 square miles are in Native States, with a population of 7,412,341. Geographically included in the Presidency but under the Government of India is the first class Native State of Baroda, with an area of 8,182 square miles and a population of 2,032,798.

With effect from the 10th October 1924 the States in the Cutch, Kathiawar and the Palanpur Agencies have been placed under direct political relations with the Government of India. The three agencies have been combined into one, the Western India States Agency, and placed under a first class Resident and Agent to the Governor General with headquarters at Rajkot. The territories under the rule of Indian Princes and Chiefs who are in direct political relations with the Government of Bombay extend now only to an area of about 28,562 sq. miles. The population of these States is about 4 millions and the revenue nearly 5 crores.

The Presidency embraces a wide diversity of soil, climate and people. In the Presidency Proper are the rich plains of Gujarat, watered by the Nerbudda and the Tapti, whose fertility is so marked that it has long been known as the Garden of India. South of Bombay City the province is divided into two sections by the Western Ghats, a range of hills running parallel to the coast. Above Ghats are the Deccan Districts, south of these come the Karnatic districts. On the sea side of the Ghats is the Konkan, a rice-growing tract, intercepted by creeks which make communication difficult. Then in the far north is Sind, totally different from the Presidency Proper, a land of wide and monotonous desert except where irrigation from the Indus has brought abounding fertility.

The People.

The population varies as markedly as soil and climate. In Sind Mahomedans predominate. Gujarat has remained true to Hinduism although long under the dominion of powerful Mahomedan kings. Here there is an amplitude of caste divisions, and a people, who although softened by prosperity, are amongst the keenest trading races in the world. The Deccan peasant has been seasoned by adversity; the saying goes that the Deccan expects a famine one year in every three, and gets it; the population is much more homogeneous than in Gujarat, and thirty per cent. are Mahrattas. The Karnatic is the land of the Lingayets, a Hindu reforming sect of the twelfth century, and in the Konkan there is a large proportion of Christians. Four main languages are spoken, Sindi, Gujarati, Marathi and Kanarese, with Urdu a rough *lingua franca* where English has not penetrated. The main castes and tribes number five hundred.

Industries.

The principal industry is agriculture, which supports sixty-four per cent. of the population. In Sind the soils are wholly alluvial, and under the influence of irrigation produce yearly increasing crops of wheat and cotton. In Gujarat they are of two classes, the black cotton soil, which yields the famous Broach cottons, the finest in India, and alluvial, which under careful cultivation in Ahmedabad and Kaira makes splendid garden land. The dominant soil characteristic of the Deccan is black soil, which produces cotton, wheat, gram and millet, and in certain tracts rich crops of sugarcane. The Konkan is a rice land, grown under the abundant rains of the submontane regions, and in the south the Dharwar cotton vies with Broach as the best in India. There are no great perennial rivers suitable for irrigation, and the harvest is largely dependent upon the seasonal rainfall, supplemented by well irrigation. A chain of irrigation works, consisting of canals fed from great reservoirs in the region of unfailing rainfall in the Ghats, is gradually being completed, and this will ultimately make the Deccan immune to serious drought. More than any other part of India the Presidency has been scourged by famine and plague during the past twenty years. The evils have not been unmixed, for tribulation has made the people more self-reliant, and the rise in the values of all produce, synchronising with a certain development of industry, has induced a considerable rise in the standard of living. The land is held on what is known as the ryotwari tenure, that is to say, each cultivator holds his land direct from Government under a moderate assessment, and as long as he pays this assessment he cannot be dispossessed.

Manufactures.

Whilst agriculture is the principal industry, others have no inconsiderable place. The mineral wealth of the Presidency is small and is confined to building stone, salt extracted from the sea, and a little manganese. But the handicrafts are widely distributed. The handloom weavers produce bright-coloured saris, and to a diminishing extent the exquisite kincobs of Ahmedabad and Surats. Bombay silver ware has a place of its own, as well as the brass work of Poona and Nasik. But the tendency is to submerge the indigenous handicrafts beneath industry organised on modern lines. Bombay is the great centre in India of the textile trade. This is chiefly found in the headquarter city, Bombay.

Number of Looms in Bombay Island.	74,545
Number of Spindles in Bombay Island.	34,68,826
Number of hands employed in the Textile Industry in Bombay Island.	154,398
Consumption of Cotton by the Mills in Bombay Island (bales)	994,500
Candies of 784 lbs. each	
Number of Spindles in Ahmedabad.	14,08,288
Number of Looms in Ahmedabad ..	30,224
Number of Spindles in Sholapore ..	289,432
Number of Looms in Sholapore ..	5,321
Number of Spindles in the Bombay Presidency (excluding Bombay Island)	23,94,185
Number of Looms in the Bombay Presidency (excluding Bombay Island)	48,243

Great impetus has been given to Bombay industries by the provision of electric power generated fifty miles away on the Ghats, and the year 1919 witnessed a phenomenal flotation of new industrial companies of almost every description.

The situation of Bombay on the western sea-board in touch at once with the principal markets of India and the markets of the West

has given Bombay an immense sea-borne trade. The older ports; Surat, Broach, Cambay and Mandvie; were famous in the ancient days; and their bold and hardy mariners carried Indian commerce to the Persian Gulf and the coasts of Africa. But the opening of the Suez Canal and the increasing size of ocean steamers have tended to concentrate it in modern ports with deep water anchorages; and the sea-borne trade of the Presidency is now concentrated at Bombay and Karachi, although attempts are being made to develop Mormugao in Portuguese territory into an outlet for the trade of the Southern Mahratta Country.

Administration.

The Presidency is administered by a Governor and an Executive Council of four members, with the assistance of three Ministers. The exact change made in the functions of the Provincial Governments is indicated in the section on the Provincial Governments (*q. v.*) where a description is given of the division of the administration into two branches, the Reserved Subjects, administered by the Governor and his Council and the Transferred Subjects, administered by the Governor and his Ministers, the whole Government commonly meeting and acting as one. In another part of that section the division between Reserved and Transferred subjects is shown. This new form of administration under the Reform Act of 1919 came into operation in January 1921. All papers relating to public service business reach Government through the Secretariat, divided into seven main departments, each under a Secretary (*a*) Finance; (*b*) Revenue; (*c*) Home and Ecclesiastical; (*d*) Political; (*e*) General, Educational and Marine; (*f*) Legal; (*g*) Public Works. The senior of the Civilian Secretaries is entitled the Chief Secretary. The Government frequently moves. It is in Bombay from November to the end of March; at Mahableshwar from April to June; in Poona from June to November; but the Secretariat is always in Bombay. Under the Governor-in-Council the Presidency is administered by four Commissioners. The Commissioner in Sind has considerable independent powers. In the Presidency Proper there are Commissioners for the Northern Division, with headquarters at Ahmedabad; the Central Division at Poona; and the Southern Division at Belgaum. Each district is under a Collector, usually a Covenanted Civilian, who has under him one or more Civilians as Assistant Collectors, and one or more Deputy Collectors. A collectorate contains on an average from eight to ten talukas, each consisting of from one to two hundred villages whose whole revenues belong to the State. The village officers are the patel, who is the head of the village both for revenue and police purpose; the talati or kulkarni, clerk and accountant; the messenger and the watchman. Over each Taluka or group of village is the mamlatdar, who is also a subordinate magistrate. The charge of the Assistant or Deputy Collector contains three or four talukas. The Collector and Magistrate is over the whole District. The Commissioners exercise general control over the Districts in their Divisions. The control of the Government over the Native States of the Presidency is exercised through Political Agents.

Justice.

The administration of justice is entrusted to the High Court sitting in Bombay, and comprising a Chief Justice, who is a barrister, and seven puisne judges, either Civilians, Barristers, or Indian lawyers. In Sind the Court of the Judicial Commissioner (The Judicial Commissioner and four Additional Judges) is the highest court of civil and criminal appeal. The growing importance of Karachi and Sind has, however, necessitated the raising of the status of the Judicial Commissioner's Court and the passing of the Sind Courts Act in August 1926, which contemplates the creation of a Chief Court for Sind with a Chief Judge and three or more Puisne Judges. The Act however has not yet been put into effect owing to financial difficulties. Of the lower civil courts the court of the first instance is that of the Subordinate Judge recruited from the ranks of the local lawyers. The Court of first appeal is that of the District or Assistant Judge, or of a first class subordinate judge with special powers. District and Assistant Judges are Indian Civilians, or members of the Provincial Service. In cases exceeding Rs. 5,000 in value an appeal from the decision of the Subordinate or Assistant Judge and from the decision of the District Judge in all original suits lies to the High Court. District and Assistant Judges exercise criminal jurisdiction throughout the Presidency, but original criminal work is chiefly disposed of by the Executive District Officers. Capital sentences are subject to confirmation by the High Court. In some of the principal cities Special Magistrates exercise summary jurisdiction (Bombay has five Presidency Magistrates, as well as Honorary Magistrates exercising the functions of English Justices of the Peace) and a Court of Small Causes, corresponding to the English County Courts.

Local Government.

Local control over certain branches of the administration is secured by the constitution of local boards and municipalities, the former exercising authority over a District or a Taluka, and the latter over a city or town. These bodies are composed of members either nominated by Government or elected by the people, who are empowered to expend the funds at their disposal on education, sanitation, the construction of roads and tanks, and general improvements. Their funds are derived from cesses on the land revenue, the toll and ferry funds. The tendency of recent years has been to increase the elective and reduce the nominated element. to allow these bodies to elect their own chairmen, whilst larger grants have been made from the general revenues for water supply and drainage.

The City Municipalities Act of 1926 works further advance in the matter of local Self-Government in the Presidency. The Act provides more adequate basis for Municipal Administration in the larger cities of the Bombay Presidency. The larger municipalities are now styled as Municipal Boroughs which are now 29 in number. The executives of these Borough Municipalities are invested with larger powers than hitherto exercised. Another important change introduced by the Act was the extension of municipal franchise to occupiers of dwellings

or buildings with annual rental values of Rs. 12 or with capital value of not less than Rs. 200.

Public Works.

The Public Works Department is under the control of two Chief Engineers who act as Secretaries to the Government; one for General Works and the other for Irrigation. Under them are Superintending Engineers in charge of divisions and Executive Engineers in charge of districts, with the Consulting Architect. The chief irrigation works are in Sind and consist of a chain of canals fed by the annual inundations from the Indus and one perennial canal the Jamrao. The Sukkur Barrage project which was inaugurated in 1923 is the greatest Irrigation Scheme in the world and is designed to ensure the vast areas of fertile land in Sind a regular and constant supply of water. It will enable 6,000,000 acres of crops to be irrigated annually, *i.e.*, over 500,000 acres more than the total area irrigated in Egypt. The scheme is not only vital to the future of Sind but of indirect benefit to the whole of India. The whole scheme is estimated to cost over 3½ million sterling or over 18 crores of rupees. In the Presidency proper the principal protective works are the Nera Canal, Gokak Canal, Mutha Canal and the Godavari Canal Scheme. In addition there is under construction a chain of protective irrigation works, originating in reservoirs in the Ghat regions. The Godavari canals were completed during the year 1917-18, and the two most important projects, namely, the Nera Right Bank Canal and the Pravara River Works system, which have been under construction since 1912 and 1911. The Nera Right Bank Canal is nearing completion. The Bandhardara Dam, the second highest yet constructed by Engineers the world over belonging to latter group was opened by His Excellency the Governor on 10th December 1926. The Lloyd Dam, which is 5,333 feet in length, 190 feet in height and 124 feet in width was opened by H. E. Sir Leslie Wilson on 27th October 1928. It cost Rs. 172 lakhs. It is remarkable as being the largest Dam in volume hitherto constructed and contains 21½ million cubic feet of masonry. The Assuan Dam in Egypt is popularly supposed to be the largest Dam in existence but that contains 19 million cubic feet. It cost also nearly 50 per cent. more than the Lloyd Dam. An idea of the magnitude of the Lloyd Dam can be gathered from the fact that if a wall 6 feet high and 15 inches thick were constructed from the masonry in the Dam it would stretch a distance of 520 miles, say from Bombay to Nagpur. These projects will irrigate certain tracts most liable to famine.

Police.

The Police Force is divided into 3 categories, *viz.*, District Police, Railway Police and the Bombay City Police. The District and Railway Police in the Presidency proper are for the purpose of control under the Inspector-General of Police who is assisted by three Deputy Inspectors-General of whom two are in charge of Ranges and the third is in charge of the Criminal Investigation Department and the Finger Print Bureau. District and Railway Police in Sind are under the Deputy Inspector-General of Police for Sind, subject to the control of the Commissioner-in-Sind. The executive management of the Police in each district and on Railways in the Presidency proper as well as in Sind, is vested in a Superintendent of Police in a District under the general direction of the Magistrate of the District concerned. For the purposes of effective supervision over the investigation and prevention of crime, some of the larger districts are divided into one or more Sub-Divisions each under a Sub-Divisional Officer who is either an Assistant Superintendent of Police or a Deputy Superintendent of Police. Inspectors are usually placed in charge of Circles comprising two or more Police Stations. Sub-Inspectors are the officers in charge of Police Stations and are primarily responsible under the law, for the investigation of offences reported at their Police Stations. On appointment Assistant Superintendents of Police, Deputy Superintendents of Police, Inspectors and Sub-Inspectors undergo a course of training at the Central Police Training School at Nasik before being posted to Districts for executive duty. The Bombay City Police is a separate force under the Commissioner of Police who is directly responsible to Government.

Education.

Education is imparted partly through direct Government agency, partly through the medium of grants-in-aid. Government maintain Arts Colleges at Bombay, Poona, Gujarat and Dharwar; the Grant Medical College, the Poona College of Engineering, the Agricultural College, Veterinary College, School of Art, Law School and a College of Commerce. The Royal Institute of Science is now open in Bombay. Most of the secondary schools are in private hands. The primary schools are maintained by Local Authorities, with a grant-in-aid. The Bombay Municipality is responsible for primary education in Bombay City. (*q. v.*, Education).

The Quinquennial Report on Public Instruction in the Bombay Presidency for the years 1922-1927 reveals much information regarding the progress of education in recent years. The most notable event of the quinquennium was the passing in 1923, of the Primary Education Act whereby the control of Primary Education was transferred from the Department to the Local Authorities. Most of the Boards have prepared schemes for the expansion of education, some of them on a compulsory basis, and many boards have levied additional taxation but the finances of Government have not permitted them to perform to the full the part contemplated by the Act. The fact, however, must not be lost sight of that during the quinquennium the assignments of Government to Primary Education rose from Rs. 97,38,154 to Rs. 1,21,59,839, the greater part of which was swallowed up by the increase in the pay of Primary teachers. "It is early to pronounce on the results of the transfer of control of the District Local Board Schools," says the Director of Public Instruction. "The control now exercised by the Boards is a very great—greater, it is believed than in any other Province in India and, except for financial purposes, the supervision of the Department has been reduced to a minimum." The chief result of the Reforms is the emphasis they have given to differences of religion and caste, owing to the system of special

representation which they have set up, and nowhere have the evils of communalism been more conspicuous than in the administration of the Primary Schools by the Local Authorities.

The quinquennium has been noticeable for the greater recognition given to the Educational needs of the Backward classes especially in Primary Education and a very liberal system of scholarships in Secondary Schools and Colleges for these classes has been introduced.

Lack of funds has not cramped the activities of Government in the field of Primary Education only. Economy has been the dominating note of the Educational policy throughout the quinquennium. So far from it being possible to provide the funds required for the expansion of Secondary and Higher Education, it has been necessary to exercise retrenchment, and that too in directions in which it could not be applied without educational loss. As one instance only, the Director of Public Instruction mentions the discontinuation of the scheme of Medical Inspection after it had been in existence for a year. Among the chief purposes for which additional funds are required, perhaps the most important is that for additional provision for Technical and Industrial Education, including the expansion of the College of Engineering and the establishment of a Technological institution of an advanced nature. In spite, however, of the inability of Government to provide all the funds that are required, advance has been made, if additional expenditure and increased numbers can be held to be regarded as evidence of advance, and it is a noticeable fact that the expenditure from local sources increased from Rs. 125 lakhs to over Rs. 183 lakhs or about 47 per cent.

The total number of institutions increased during the quinquennium by 1,378 to 16,211. Recognised institutions increased by 1,542 to 14,784 while unrecognised institutions decreased by 154 to 1,427. Of the recognised institutions, 15 are Arts and 10 Professional Colleges, 529 Secondary Schools, 13,835 Primary Schools and 395 Specials schools. The 13,835 Primary schools were distributed among 10,244 out of 26,731 inhabited towns and villages, the number of towns and villages with Primary schools showing an increase of 557 during the quinquennium.

The total number of pupils of all kinds receiving instruction was 1,148,714 an increase of 194,261 over the figure for 1921-22, and of 74,614 over that for 1925-26. Of these 925,855 were boys and 222,859 girls. Of the total number under instruction 4,819 were Europeans, 32,488 Indian Christians, 881,752 Hindus (including Aboriginal and Depressed Classes), 207,974 Muhammadans, 17,721 Parsis and 3,960 others.

The Educational Department is administered by a Director, with an Inspector in each Division and a Deputy Inspector with Assistants in each district. Higher education is controlled by the Bombay University (established in 1857) consisting of the Chancellor (the Governor of the Presidency), the Vice-Chancellor appointed by Government for two years), and 100 Fellows of whom 10 are *ex-officio*; 10 elected by the Graduates, 10 by the Faculties, and 80 are nominated by the Chancellor.

Proposals have been recently put forward by the Committee on University Reform for the reorganization of the University on sounder lines, but these are still under the consideration of the authorities. A Bill to amend the University Act is before the Legislature.

The principal educational institutions are:—

Government Arts Colleges—

Elphinstone College, Bombay, Principal, Mr. H. Hamill, M.A.

Deccan College, Poona, Principal, Mr. H. G. Rawlinson, M.A.

Gujarat College, Ahmedabad, Principal, G. Findlay Shirras, M.A., F.S.S. (Offg.)

Karnatak College, Dharwar, Principal, Mr. H. V. Hampton, M.A.

Private Arts Colleges—

St. Xaviers, Bombay (Society of Jesus), Principal, Rev. Father Duhr, S. J.

Wilson College, Bombay (Scottish Mission), Principal, Rev. J. Mackenzie, M.A.

Fergusson College, Poona (Deccan Educational Society), Principal, K. R. Kanitkar, M.A., B.Sc.

Baroda College, Baroda (Baroda State), Principal, S. G. Barrow, B.Sc.

Samaldas College, Bhavnagar (Bhavnagar State), Principal, Mr. T. K. Shahani, M.A.

Bahauddinbhai College, Junagadh State Principal, Mr. M. M. Joshi, M.A.

Special Colleges—

Grant Medical College, Bombay (Government), Dean, Captain S. L. Bhatia, I.M.S.

College of Engineering, Poona (Government), Principal, Mr. C. Graham. Smith, O.B.E.

Agricultural College, Poona (Government), Principal, Dr. William Burns.

Chiefs' College, Rajkot, Principal, Mr. J. T. Turner.

College of Science, Ahmedabad.

Law College, Bombay, Principal, Dr. J. S. Khergamvala, LL. D. (London.)

College of Commerce, Bombay, Principal, Mr. M. L. Tannan.

Veterinary College, Bombay, Mr. K. Hewlett.

Haffkine Institute, Bombay, Director, Lt.-Col. F. P. Mackie, I.M.S.

Sir J. J. School of Art, Bombay (Government), Principal, Mr. W. E. G. Solomon.

Victoria Technical Institute, Bombay. Principal, Mr. A. J. Turner, B.Sc., F. I. C.

Medical.

The Medica Department is in the charge of the Surgeon-General and Sanitation in that of the Director of Public Health, both members of the Indian Medical Service. Civil Surgeons stationed at each district headquarters are responsible for the medical work of the district; whilst sanitation is entrusted to one of the Assistant Directors of Public Health. Three large hospitals are maintained by the Government in Bombay, and arrangements are being made to increase the hospital accommodation in the City. It is hoped to set up in the near future not less than 850 additional beds in the various hospitals of the city. Well-equipped hospitals exist in all important up-country stations. Over three million persons including 81,000 in-

patients are treated annually. The Presidency contains 6 Lunatic Asylums and 16 institutions for the treatment of Lepers. Vaccination is carried out by a staff under the direction of the Director of Public Health. Sanitary work has received an immense stimulus from the large grants made by the Government from time to time.

Finance.

Under the Reform Scheme of 1919 Provincial Finance entered on a new phase. Before the passing of this Act Provincial finance was incorporated in Imperial Finance. The Provinces had certain heads of revenue of their own and other heads which they divided with the Government of India. By the new constitution a comparatively clean cut was made between the finances of the Government of India and those of the Provinces. Such revenues as they enjoy the Provinces enjoy in full, and in return they make cash contributions to the Government of India, fixed for a term of years. The general principle underlying this settlement is that those contributions shall gradually disappear. The present contribution of the Government of Bombay is Rs. 56 lakhs.

Estimated Revenue for 1928-29.

	PRINCIPAL HEADS OF REVENUE.	Rs.
V	Land Revenue	5,38,00,000
VI	Excise	3,91,18,000
VII	Stamps	1,70,10,000
VIII	Forests	73,94,000
IX	Registration	11,94,000
IXA	Scheduled Taxes	21,37,000
	Total	12,06,53,000
	Irrigation, Navigation, Embankment, &c.	
XIII	Works for which Capital Accounts are kept	54,12,000
XIV	Work for which no Capital Accounts are kept	85,000
	Total	54,97,000
	Debt Service	
XVI	Interest	1,50,66,000
	Civil Administration.	
XVII	Administration of Justice	....
XVIII	Jails and Convict Settlements	17,58,000
XIX	Police	5,65,000
XXI	Education	10,92,000
XXII	Medical	13,20,000
XXIII	Public Health	12,92,000
XXIV	Agriculture	14,44,000
XXV	Industries	4,23,000
XXVI	Miscellaneous Departments	2,000
	Total	80,79,000
	Civil Works	
XXX	Civil Works	38,97,000
	Miscellaneous.	
XXXIII	Receipts in aid of Superannuation	13,14,000
XXXIV	Stationery and Printing	4,36,000
XXXV	Miscellaneous	24,23,000
	Total	41,73,000
XL	Extraordinary Receipts	23,000
	Total Revenue	15,73,88,000
	Civil Works and Miscellaneous public improvements receipts not charged to Revenue.	
XLII	Bombay Development Scheme	8,78,000
	Debt heads :—	
	Deposits and advances Loans and advances by provincial Government Advances from provincial Loans Fund	5,22,25,000
	Opening Balance	2,68,72,000
	Grand Total	23,73,63,000

Estimated Expenditure for 1928-29.

DIRECT DEMANDS ON THE REVENUE.

		Rs.
5.	Land Revenue	64,76,000
6.	Excise	51,89,000
7.	Stamps	2,78,000
8.	Forest	42,11,000
8A.	Forest Capital outlay	2,98,000
9.	Registration	6,93,000
9A.	Scheduled Taxes	21,000
	Total	1,71,66,000
	Irrigation, Embankment, &c., Revenue Account.	
14.	Interest on works for which Capital Accounts are kept	56,66,000
15.	Other Revenue Expenditure financed from Ordinary Revenue	29,53,000
15.	(1) Other Revenue Expenditure financed from famine Insurance Grants	14,61,000
16.	Construction of Irrigation Works	10,00,000
	Total	1,10,74,000
	Debt Service.	
19.	Interest on Ordinary Debt	2,07,65,000
21.	Reduction or avoidance of debt	14,77,000
	Total	2,22,42,000
	Civil Administration.	
22.	General Administration	2,23,33,000
24.	Administration of Justice	74,23,000
25.	Jails and Convict Settlements	25,27,000
26.	Police	1,70,27,000
27.	Ports and Pilotage	21,000
30.	Scientific Departments	87,000
31.	Education	2,09,25,900
32.	Medical	53,88,600
33.	Public Health	30,41,000
34.	Agriculture	28,55,300
35.	Industries	1,02,000
37.	Miscellaneous Departments	4,81,000
	Total	8,22,11,800
	Civil Works.	
41	Civil Works	1,51,20,000
	Miscellaneous.	
43.	Famine Relief and Insurance	6,62,000
45.	Superannuation Allowances and Pensions	51,99,000
46.	Stationery and Printing	17,26,000
47.	Miscellaneous	20,78,000
	Total	96,65,000
51 & 51A.	Contribution and Miscellaneous adjustments between Central and Provincial Governments	...
	Expenditure in England	37,71,000
	Total Expenditure	16,69,55,800
	Capital Account not charged to Revenue.	
55	Construction of Irrigation Works	2,61,08,000
56	Bombay Development Scheme	1,61,72,000
	Other Expenditure not charged to Revenue	72,35,000
	Debt Heads, Deposits and Advances	3,72,77,000
	Closing Balance	2,16,59,200
	Grand Total	23,73,63,000

Governor and President-in-Council.

H. E. The Right Hon'ble Sir Frederick Hugh Sykes P. C., G. C. I. E., G. B. E., K. C. B., C.M.G., C.S.I.

Personal Staff.

Private Secy.—James Campbell Ker, C.I.E. M.A., I.C.S.

Mily. Secretary—Major H. G. Vaux, C.S.I., C.I.E., M.V.O., J.P.

Surgeon—Major A. G. Tressider, C.I.E., M.D., I.M.S.

Aides-de-Camp:—Captain G. Horsfield, 2nd (Derajat) Mountain Battery, R.J., F.F Lieutenant C. L. Mould, 2nd Battalion, The Royal Ulster Rifles Lieutenant C. A. J Nicholson, Late Irish Guards. Lieutenant, J. H. Cawley-Way, Royal Marines

Hon. Aides-Camp.—Captain E. V. Whish O.B.E., R.I.M., Port Officer, Captain F. Seymour-Williams, 3 (Bom.) Coy., D.S.O., R. E., A.F.I. Meherban Shankarrao Parashramrao Ramchandra *alias*. Appa Saheb Patwardhan; Chief Of Jamkhandi, Honorary Captain Meherban Malojirao Mudhojirao *alias* Nana Saheb Naik Nimbalkar, Chief of Phaltan; Honorary Captain Kumar Shri Naharsinghi of Baria.

Commandant, H. E. the Governor's Bodyguard.—Major H. de N. Lucas, 7th Light Cavalry.

Adjutant, H. E. The Governor's Bodyguard.—Capt. E. D. Holder, Skinners Horse.

Indian Aide-de-Camp—Risaldar Major Lakhpat Singh, 8th King George's Own Light Cavalry.

Members of Council and Ministers.

The Hon'ble Mr. J. L. Rieu, C.S.I., I.C.S. (Revenue); The Hon. Mr. J. E. B. Hotson, C.S.I., I.C.S. (Home); The Hon. Sir Gulam Husain Hidayatallah (General); The Hon. Mr. G. B. Pradhan (Finance); The Hon. Dewan Bahadur Harilal Desai (Local Self-Government); The Hon. Moulvi Rafiuddin Ahmad (Education); and the Hon. Mr. B. V. Jadhav (Agriculture.)

The Educational portfolio includes, among other subjects, Medical Administration, Public Health, Sanitation and Industrial Development. The Minister of Local Self-Government also deals with Public Works (roads and buildings) and the Civil Veterinary Department; while Agriculture, Co-operative Societies, Registration and some other matters are in charge of the Minister of Forests and Excise.

SECRETARIES TO GOVERNMENT.

Revenue Department.—J. W. Smyth, M.A., I.C.S.

Home and Ecclesiastical Department.—H. F. Knight, I.C.S.

Chief Secretary, Political Department.—James Rea Martin, C.I.E., B.A., I.C.S. (Acting).

Secretary, General, Educational and Marine Departments—C. W. A. Turner, B.A., I.C.S.

Secretary, Finance Department:—Gilbert Wiles, B.A., I.C.S.

Legal Department and Remembrancer of Legal Affairs.—Balak Ram, I.C.S.

Public Works Department.—R. T. Harrison.

Public Works Department, Joint Secretary—Denis Robert Howe Browne, O.B.E.

MISCELLANEOUS APPOINTMENTS.

Advocate-General—Sir Jamshedji Behramji Kanga, Kt., M.A., LL.B.

Inspector-General of Police—F. C. Griffith, C.S.I., O.B.E., (on leave); G. S. Wilson (*Offg.*)

Director of Public Instruction—F. B. P. Lory, M.A.

Surgeon-General—Lt.-Col. R. W. Anthony, I.M.S.

Oriental Translator—Sayed Moniruddin S Moulvie.

Chief Conservator of Forests—H. L. Newman.

Talukdari Settlement Officer,—A. W. Mackie, I.C.S.

Settlement Commissioner and Director of Land Records—F. G. H. Anderson, I.C.S.

Director of Agriculture—Dr. T. F. Main, O.B.E., D.S.C.

Registrar of Co-operative Societies—V. S. Bhide, I.C.S.

Municipal Commissioner, Bombay—A. R. Dalal, I.C.S.

Vice-Chancellor, Bombay University—Sir Chimanlal H. Setalvad.

Registrar, Bombay University—Fardunji M. Dastur.

Commissioner of Police, Bombay—P. A. Kelly, C.I.E.

Director of Public Health—Lt.-Col. H. Melhuish, I.M.S.

Accountant-General—I. C. Nixon, I.C.S.

Inspector-General of Prisons—Lt.-Col. J. H. Murray, C.I.E., I.M.S.

Postmaster-General—D. Banerji, N.A.I.E.E.

Commissioner of Customs, Salt, Opium and Excise—J. P. Brander, I.C.S.

Collector of Customs, Bombay—A. M. Green, I.C.S.

Consulting Architect to Government—A. J. A. Illingworth.

Consulting Surveyor to Government—A. E. Mirams, F.S.I., F.S.A., F.R.S.A.

Registrar of Companies—H. C. B. Mitchell.

Director of Information and Labour Intelligence:—J. F. Gennings, Bar-at-Law.

Sheriff—Sir Reginald Spence, Kt.

GOVERNORS OF BOMBAY.

Sir Abraham Shipman 1662
Died on the island of Anjediva in Oct. 1664
Humfrey Cooke 1665
Sir Gervase Lucas 1666
Died, 21st May 1667.
Captain Henry Garey (*Officiating*) .. 1667
Sir George Oxenden 1668
Died in Surat, 14th July 1669.
Gerald Aungier 1669
Died in Surat, 30th June 1677.
Thomas Rolt 1677
Sir John Child, Bart. 1681
Bartholomew Harris 1690
Died in Surat, 10th May 1694.
Daniel Annesley (*Officiating*) 1694
Sir John Gayer 1694
Sir Nicholas Waite.. 1704
William Aislabie 1708
Stephen Strutt (*Officiating*) 1715
Charles Boone 1715
William Phipps 1722
Robert Cowan 1729
Dismissed.
John Horne 1734
Stephen Law 1739
John Geekie (*Officiating*) 1742

William Wake 1742
Richard Bourchier.. 1750
Charles Crommelin.. 1760
Thomas Hodges 1767
Died, 23rd February 1771.
William Hornby 1771
Rawson Hart Boddam 1784
Rawson Hart Boddam 1785
Andrew Ramsay (*Officiating*) 1788
Major-General William Medows 1788
Major-General Sir Robert Abercromby, K.C.B. (*a*). 1790
George Dick (*Officiating*) 1792
John Griffith (*Officiating*).. 1795
Jonathan Duncan 1795
Died, 11th August 1811.
George Brown (*Officiating*) 1811
Sir Evan Nepean, Bart. 1812
The Hon. Mountstuart Elphinstone .. 1819
Major-General Sir John Malcolm, G.C.B. 1827
Lieut.-General Sir Thomas Sidney Beckwith, K.C.B. 1830
Died, 15th January 1831.
John Romer (*Officiating*) 1831
The Earl of Clare 1831
Sir Robert Grant, G.C.H. 1835
Died, 9th July 1838.
James Farish (*Officiating*) 1838
Sir J. Rivett-Carnac, Bart. 1839
Sir William Hay Macnaghten, Bart. (*b*) . ..
George William Anderson (*Officiating*) .. 1841
Sir George Arthur, Bart., K.C.H. 1842
Lestock Robert Reid (*Officiating*) .. 1846
George Russell Clerk 1847
Viscount Falkland 1848
Lord Elphinstone, G.C.H., P.C. 1853
Sir George Russell Clerk, K.C.B. (2nd time) 1860
Sir Henry Bartle Edward Frere, K.C.B. 1862
The Right Hon. William Robert Seymour Vesey FitzGerald. 1867
Sir Philip Edmond Wodehouse, K.C.B. .. 1872
Sir Richard Temple, Bart., K.C.S.I. .. 1877
Lionel Robert Ashburner, C.S.I. (*Acting*).. 1880
The Right Hon. Sir James Fergusson, Bart., K.C.M.G. 1880
James Braithwaite Peile, C.S.I. (*Acting*).. 1885
Baron Reay 1885
Baron Harris 1890
Herbert Mills Birdwood, C.S.I. (*Acting*) .. 1895
Baron Sandhurst 1895
Baron Northcote, C.B. 1900
Sir James Monteath, K.C.S.I. (*Acting*) .. 1903
Baron Lamington, G.C.M.G., G.C.I.E. .. 1903
J. W. P. Muir-Mackenzie, C.S.I. (*Acting*). 1907
Sir George Sydenham Clarke, G.C.M.G., G.C.I.E. (*c*). 1907
Baron Willingdon, G.C.I.E. 1913
Sir George Ambrose Lloyd, G.C.I.E., D.S.O.(*d*) 1918
Sir Leslie Orme Wilson, P.C., G.C.I.E., C.M.G., D.S.O. 1923
Sir Frederick Hugh Sykes, P.C., G.C.I.E. .. 1928
G.B.E., K.C.B., C.M.G.

(*a*) Proceeded to Madras on duty in Aug. 1793 and then joined the Council of the Governor-General as Commander-in-Chief in India on the 28th Oct. 1793.

(*b*) Was appointed Governor of Bombay by the Honourable the Court of Directors on the 4th Aug. 1841, but, before he could take charge of his appointment, he was assassinated in Cabul on the 23rd Dec. 1841.

(*c*) Afterwards (by creation) Baron Sydenham

(*d*) Afterwards (by creation) Baron Lloyd

BOMBAY LEGISLATIVE COUNCIL.

The Hon. Mr. A. M. K. Dehlavi, Bar-at-law, *President.*

Rao Bahadur S. T. Kambli, *Deputy President.*

ELECTED MEMBERS.

Name and class of Constituency.	Name of Member.
Bombay City (North). (Non-Muhammadan) Urban.	Mr. Ramchandra Santuram Asavle Mr. Framroz Jamshedji Ginwalla Dr. Manchersha Dhunjibhai Gilder.
Bombay City (South). (Non-Muhammadan) Urban.	Mr. Kharshed Framji Nariman Mr. Phirozsha Jehangir Murzban Mr. Balubhai Tribhovandas Desai.
Karachi City (Non-Muhammadan) Urban.	Mr. Naraindas Anandji Bechar
Ahmedabad City (Non-Muhammadan) Urban.	The Hon'ble Dewan Bahadur Harilal Desaibhai Desai.
Surat City (Non-Muhammadan) Urban.	Dr. Mohannath Kedarnath Dixit
Sholapur City (Non-Muhammadan) Urban.	Mr. Natvarlal G. Mujumdar
Poona City (Non-Muhammadan) Urban.	Mr. Narso Balkrishna Chandrachud
Ahmedabad District. (Non-Muhammadan) Rural	Mr. Amritlal Dalpatbhai Sheth Mr. Jethalal Chimanlal Swaminarayan
Broach District. (Non-Muhammadan) Rural.	Mr. Haribhai Jhaverbhai Amin
Kaira District. (Non-Muhammadan) Rural.	Rao Saheb Dadubhai Purshottamdas Desai Mr. Jivabhai Revabhai Patel.
Panch Mahals Dist. (Non-Muhammadan) Rural.	Mr. Wamanrao Sitaram Mukadam
Surat District. (Non-Muhammadan) Rural.	Mr. Hassamal Baharmal Shivadasani Rao Bahadur Bhimbhai Ranchhodji Naik.

Name and class of Constituency.	Name of Member.
Thana and Bombay Suburban Districts (Non-Muhammadan) Rural.	Mr. Shankarrao Jayaramrao Zunzarrao Mr. C. R. Shroff.
Ahmednagar District. (Non-Muhammadan) Rural.	Mr. Namdevrao Eknath Navle Sardar Shivrao Bhawanrao Thorat
East Khandesh District. (Non-Muhammadan) Rural.	Mr. Rajmal Lakhichand Mr. Hari Vinayak Pataskar Mr. Dongarsing Ramji Patil.
Nasik District. (Non-Muhammadan) Rural.	Mr. Ramchandra Ganesh Pradhan Rao Saheb Ramchandrarao Vithalrao Wandekar
Poona District. (Non-Muhammadan) Rural	Mr. Sadashivrao *alias* Khaserao Jivajirao Pawar. Mr. Narayan Ramji Gunjal.
Satara District. (Non-Muhammadan) Rural.	Mr. Bhaskarrao Vithojirao Jadhav. Rao Bahadur Raoji Ramchandra Kale. Mr. Laxman Mahadeo Deshpande.
Belgaum District. (Non-Muhammadan) Rural.	Rao Bahadur Shanmukhapa Ningapa Angadi Mr. Panditapa Rayapa Chikodi.
Bijapur District. (Non-Muhammadan) Rural.	Mr. Sangappa Ameengouda Sardesai
Dharwar District. (Non-Muhammadan) Rural.	Rao Bahadur Sidappa Totappa Kambli Mr. Vishwanath Narayan Jog.
Kanara District. (Non-Muhammadan) Rural.	Mr. M. D. Karki.
Ratnagiri District. (Non-Muhammadan) Rural.	Mr. Venkatrao Anandrao Surve Mr. Bhaskar Ramchandra Nanal
Eastern Sind. (Non-Muhammadan) Rural.	Mr. Jairamdas Doulatram
Western Sind. (Non-Muhammadan) Rural.	Mr. Bhojsing Gurdinomal Pahalajani
Sholapur District. (Non-Muhammadan) Rural.	Mr. Shamrao Pandurangrao Ligade
Kolaba District. (Non-Muhammadan) Rural.	Mr. Atmaram Mahadev Atavane
West Khandesh District. (Non-Muhammadan) Rural.	Mr. Madhavrao Gopalrao Bonsle
Bombay City (Muhammadan)) Urban.	Mr. Hussanali Mahomed Rahimtoola Mr. Hussainbhai Abdulla Lalji
Karachi City (Muhammadan) Urban.	Mr. Mir Mahomed Baloch Shaikh.
Ahmedabad and Surat Cities. (Muhammadan) Urban.	Khan Saheb Alibhai Mahomedbhai Mansuri
Poona and Sholapur Cities (Muhammadan) Rural.	Khan Saheb Abdul Latif Haji Hajrat Khan
The Northern Division (Muhammadan) Rural.	The Honourable Mr. Ali Mahomed Khan Dehlavi Mr. Daudkhan Shalebhoy. Sardar Bhasaheb *alias* Dulabawa Raisinghji.
The Central Division (Muhammadan). Rural.	Mr. Shaikh Abdul Aziz Abdul Latif Moulana Moulvi Rafiuddin Ahmad. Mr. Gulam Ahamad Dagumiya.
The Southern Division. (Muhammadan) Rural.	Mr. Haji Ibrahim Haji Mahomed Jitekar Sardar Mahaboobali Khan Mahamad Abkarkhar Biradar. Mr. Divansaheb Abasaheb Janvekar.
Hyderabad District. (Muhammadan) Rural.	Syed Miran Muhamad Shah, B.A., LL.B. Mr. Noor Muhammad Muhammad Sujawal.
Karachi District (Muhammadan) Rural.	Mr. Rais Fazul Mohomed Walad Khan Saheb Haji Baksh Laghari. Mr. Ghulam Haider Shah Walad Sahebdino Shah.
Larkana District. (Muhammadan) Rural.	Khan Bahadur Shah Nawaz Khan Ghulam Murtaza Khan Bhutto. Khan Saheb Ghulam Muhammad Abdullah Khan Isran. Mr. Muhammad Ayub Shah Muhammad Khuhro
Sukkur District. (Muhammadan) Rural.	Khan Bahadur Jan Mahomed Khan Walad Khan Bahadur Shah Passandkhan. Mr. Allahbaksh Walad Khan Saheb Haji Mahomed Umar.
Thar & Parkar District (Muhammadan) Rural.	Khan Saheb Ghulam Nabi Shah Mouljali Shah. Mr. Janmahomed Khan Walimahomed Khan Bhurgri.

Name and class of Constituency.	Name of Member.
Nawabshah District (Muhammadan) Rural.	Khan Bahadur Haji Imambaksh Khan Ghulam Rasul Khan Jatoi.
Upper Sind Frontier (Muhammadan) Rural.	Khan Sahib Sher Mahomed Khan Karam Khan Bijarani.
Bombay City. (European.)	Mr. J. Addyman.
Presidency. (European.)	Mr. A. C. Owen.
Deccan Sardars & Inamdars. Landholders.	Sardar Gangadharrao Narayan Mujumdar.
Gujarat Sardars & Inamdars. Landholders.	Mr. Jeramdas Behechardas Desai.
Jagirdars & Zamindars. (Sind) Landholders.	Sayed Muhammad Kamil Shah Kabu Muhammad Shah.
Bombay University.	Mr. K. M. Munshi.
Bombay Chamber of Commerce. Industry.	Mr. E. Miller.
Karachi Chamber of Commerce. Industry.	Mr. W. B. Hossack.
Bombay Trades Association, Commerce. Industry.	Mr. F. W. Petch.
Bombay Millowners' Association, Commerce and Industry.	Mr. J. B. Petit.
Ahmedabad Millowners' Association, Commerce and Industry.	Mr. Gordhandas I. Patel.
Indian Merchants' Chamber and Bureau, Commerce & Industry.	Mr. Lalji Naranji.

NOMINATED.

Non-Officials.

Mr. J. P. Thornber.
,, F. Oliveira.
,, Sitaram Keshav Bole.
,, Syed Munawar, B.A.
,, S. C. Joshi, M.A., LL.B.
Dr. B. R. Ambedkar, Bar-at-Law.
,, Purshottam Salunke, L. M. & S.
Mr. W. Ellis Jones.
Sir Vasantrao Dabholkar, Kt., O.B.E.
Mr. R. N. Rajaduya.

Officials.

Mr. H. L. Painter, I.C.S.
,, W. W. Smart, I.C.S.
,, J. R. Martin, C.I.E., I.C.S.
,, J. W. Smyth, I.C.S.
,, G. Wiles C.I.C., I.C.S.
,, C. W. A. Turner, C.I.E.. I.C.S.
,, H. F. Knight, I.C.S.
,, Balak Ram, I.C.S.
,, D. R. H. Browne, O.B.E.
,, R. T. Harrison,
,, J. Ghosal, C.I.E., I.C.S.
,, J. P. Brander, I.C.S.
,, F. G. H. Anderson, I.C.S.
,, S. H. Covernton, I.C.S.
,, N. J. Wadia, I.C.S.

The Madras Presidency.

The Madras Presidency occupies the whole southern portion of the Peninsula, and, excluding the Native States, most of which have now come under the direct control of the Government of India, has an area of 141,075 square miles. It has on the east, on the Bay of Bengal, a coast line of about 1,200 miles; on the South on the Arabian Sea, a coast line of about 450 miles. In all this extent of coast, however, there is not a single natural harbour of any importance; the ports, with the exception of Madras, and perhaps of Cochin, are merely open roadsteads. A plateau, varying in height above sea-level from about 100 to about 300 feet and stretching northwards from the Nilgiri Hills, occupies the central area of the Presidency; on either side are the Eastern and the Western Ghats, which meet in the Nilgiris. The height of the western mountain-chain has an important effect on the rainfall. Where the chain is high, the intercepted rain-clouds give a heavy fall, which may amount to 150 inches on the seaward side, but comparatively little rain falls on the landward side of the range. Where the chain is low, rainclouds are not checked in their westward course. In the central table land on the east coast the rainfall is small and the heat in summer excessive. The rivers, which flow from west to east, in their earlier course drain rather than irrigate the country; but the deltas of the Godavari, Kistna and Cauvery are productive of fair crops even in time of drought and are the only portions of the east coast where agriculture is not dependent on a rainfall rarely exceeding 40 inches and apt to be untimely.

Population.

The population of the Presidency was returned at the census of 1921 as 42,794,155, an increase over the figure of 1911 of 2·2 per cent. The tendency has been for the more densely populated portions of the province to increase their numbers while the sparsely inhabited tracts have still further declined in density. Hindus account for 89 per cent. of the population, Mahomedans for 7, Christians for 3, Animists for 1. The vast majority of the population is of the Dravidian race and the principal Dravidian languages, Tamil and Telugu, are spoken by 18 and 16 million persons respectively. Of every thousand people, 410 speak Tamil, 377 speak Telugu, 75 Malayalam, 37 Oriya, 35 Canarese and 23 Hindustani.

Government.

The Madras Presidency is governed on the system generally similar to that obtaining in Bombay and Bengal. There are associated with the Governor four members of the Executive Council in charge of the Reserved Subjects and three Ministers in charge of the Transferred Subjects. Madras administration differs, however, in some important respects from that of other major provinces. There is no intermediate local authority between the Collector of the District and the authorities at headquarters, Commissioners of Divisions being unknown in Madras. Another feature peculiar to the Southern Presidency is the manner of choice of the ministers. Following the practice of the Mother of Parliaments, Madras Governors have, even since the inception of the Reforms, called upon the leader of the dominant party to form a ministry, giving him freedom to select his colleagues on the ministry. Consequently he enjoys the status of Chief Minister—unknown in other provinces in India.

Agriculture and Industries.

The principal industry of the province is agriculture in which 68 per cent. of the population is engaged. The principal food crops are rice, cholam, ragi and kambu. The industrial crops are cotton, sugar-cane and groundnuts. Agricutural education is rapidly progressing in the presidency with a well known college at Coimbatore, with classes for juvenile and adult labourers attached to it, one agricultural middle Schools and numerous demonstration farms. The opening of two more schools have been sanctioned. While paddy, which is the staple food, of the population, occupies the largest cultivable area, cotton is by no means an inconsiderable crops of the province and is receiving close attention at the hands of local agricultural authorities. The area under cotton is estimated at 2,303,688 acres and, as in the case of paddy, efforts are being made to produce better strains of cotton suited to different localities by means of both selection and hybridization. Side by side with an increase in the area under cotton, there has been a strict exclusion of inferior cotton from existing good staple areas, while improved varieties have been systematically introduced. A special feature of the agricultural activities in the Presidency is the large industry which the planting community have built up, contributing substantially to the economic development of the province. They have organised themselves as a registered body under the title of "The United Planters' Association of South India," on which are represented Coffee, tea, rubber and a few other minor planting products. There are some 23 cotton mills in the Presidency which employ 34,000 operatives. Minor industrial concerns number over 120 and consist of oil mills, rope, rubber and tile works. Tanning is one of the principal industries of the Presidency, and there is considerable export trade in skins and hides although hide tanners have not been doing well of late. The manufacturing activities which are at present under the direction of the Department of Industries are mainly confined to the production of soap and inks. The matchmaking industry is just raising its head in Madras. In 1927 the Council complied with a demand made by the minister in charge of Industries for funds for appointing a special officer to conduct an exhaustive survey of the existing and potential cottage industries in the Presidency. The Special Officer has since been appointed and the survey is in progress. Preliminary reports on the survey in the Ceded districts and the districts of Madura, Ramnad, Trichinopoly and Tinnevelly have already been published and are also being considered by the Government. The aggregate value of seaborne trade of the Presidency has been showing a steady increase and is now in the neighbourhood of Rs. 80 crores per annum. As in other provinces, the forest resources are exploited by Government. There are close upon 19,000 square miles of reserved forests.

Education.

The Presidency's record in the sphere of education has been one of continuous progress. There are at present about 50,000 public institutions, ranging from village primary schools to arts and professional colleges, their total strength being about 2,500,000. Special efforts

are being made to provide education for boys belonging to the Depressed Classes. The Council passed a resolution in the past year at the instance of a nominated member that poor girls reading in any educational institution in the province—Government, local fund, Municipal or aided—should be exempted from School fees in any Standard up to III Form. The total expenditure of the province on Education is in the neighbourhood of Rs. 452 lakhs. The principal educational institutions in the province are the Presidency College, the Christian College and Pachaiyappa's College, Madras; the St. Joseph's College, Trichinopoly; the Government College, Kumbakonam; the Government College, Rajamundry; the Maharaja's College, Trivandrum; the Agricultural College, Coimbatore; and the Medical and the Engineering Colleges at Madras.

Cochin Harbour Scheme.

The Government of Madras and the authorities of the Cochin and Travancore States have come to an agreement regarding the financing of the Cochin Harbour scheme. The importance of this project lies in the fact that a good harbour at Cochin would lead to the development of a valuable hinterland which is at present far removed from any convenient port. The scheme is to cut a passage through the bar which blocks the entrance from the sea to an extensive backwater. A trial cut was made in 1923 and the effect of the monsoon thereon observed. The results recorded were examined by a committee of Harbour Engineers in England which reported favourably on the prospects of the scheme. The plant necessary for effecting a deeper and wider cut has been secured and the work is in progress. Everything had been prepared at Cochin for proceeding with the major works and with the arrival of the dredger and the pipe line on the lines of the Bombay plant work is progressing rapidly. During the working season of 1927-28 the first part of the channel across the bar has been completed. The channel is 11,026 feet long and 400 feet wide. The depth of the outer half is from 34 to 35 feet L. W. O. S. T. and of the inner half from 30 to 32 feet at L. W. Small steamers have entered the backwater during the S. W. monsoon period of 1928. If access through the bar can be established at all periods of the year, a portion of the backwater will be dredged to afford anchorage for ocean-going steamers.

Vizagapatam Harbour Project.

Even more pregnant with future possibilities is the scheme for the development of the Vizagapatam harbour. Proposals for the development of the port at this place have been under consideration since 1859; but the success of the project is bound up with the construction of direct railway communication between Vizagapatam and the Central Provinces; for the quantity of trade which could be obtained from the littoral itself is insufficient to justify the capital expenditure which would be required. In May 1925 the Government of India declared Vizagapatam a major port thereby enabling the development of the port under the directions of the Central Government. Preliminary operations commenced in the end of the year and were continued vigorously in 1926 with the aid of dredgers and rock-breakers. It is expected that the construction of the harbour will take four or five years. The surrounding hill-sides and adjacent areas will meanwhile be developed for industrial, trading and residential purposes.

Local Self-Government.

As in Bombay, the Madras District Municipalities and Local Boards Acts have been amended in various directions, all of which tend towards liberalisation. Legislation has also been passed permitting the establishment of Village Panchayats, or Committees of Elders. Over 2,500 Panchayats have come into existence in the Presidency. Generally speaking the Local Boards in Madras display a courageous disposition to levy taxes up to the sanctioned maximum. Even then some of them are unable to make both ends meet. Local Bodies in the Presidency have been enabled to levy a tax on entertainments by the Madras Local Authorities Entertainments Tax Act, 6192.

Irrigation.

In March 1925, the Secretary of State sanctioned the Cauvery Reservoir Project, the estimated cost of which amounts to £ 4½ millions. The project has been framed with two main objects in view. The first is to improve the existing fluctuating water supplies for the Cauvery Delta irrigation of over a million acres; the second is to extend irrigation to a new area of 301,000 acres, which will, it is estimated, add 150,000 tons of rice to the food supply of the country. The scheme which is expected to be completed before 1933 provides for a large dam at Metur on the Cauvery to store 93,500 million cubic feet of water and for a canal nearly 88 miles long with a connected distributary system. Owing to the necessity for providing adequate surplus arrangements to dispose of floods similar to the phenomenal floods of 1924 and to other causes the estimate had to be revised and the revised estimate stands at about £ 5½ millions. Another important project is the Periyar project which is intended not only for irrigation purposes but also for providing water power for generating electricity. Taking its rise in the Western Ghats, the river flows into the Arabian Sea through Travancore State territory. After prolonged negotiations, the Travancore Durbar consented to the water being caught and stored in the Travancore hills for being diverted towards the East. Some three thousand feet above sea-level a concrete and masonry dam has been constructed and nearly 50 feet below the crest-level of the dam a channel through the summit of the range carries the waters into the eastern water-shed where they are led into the river Vaigai. The total quantity of water impounded to crest level is 15,660 million cubic feet. By this work, a river ordained by Nature to flow into the Arabian Sea has been led across the Peninsula into the Bay of Bengal irrigating in its way well over 100,000 acres of land. The irrigable area commanded by the Periyar system is 142,749 acres, while the supply from the lake was sufficient only for 130,000 acres. To make up for this deficit, Government contemplate increasing the effective capacity of the lake by lowering the water-shed cutting at an estimated cost of Rs. 2½ lakhs. The area already under irrigation in the Madras Presidency totals 7 million acres. Of this, over 3 million acres are served by petty irrigation works numbering about 35,000

Electric Schemes.

Of the major schemes that have been receiving Government's attention, a hydro-electric undertaking whose details are expected to be announced in the near future, is by far the most important. The protracted negotiations regarding the purchase by the Madras Government of what is known as the Pykara concession, which includes a huge and powerful water-fall have concluded and it has been decided to work the scheme as a government venture. It has indeed been publicly announced that Government do not propose to hand over either this water-fall or any other source of water power to any private syndicate for development. A member of the American Institute of Electrical Engineers with wide experience of big hydro-electric schemes in Canada has been appointed for five years to be in sole charge of the Pykhara Scheme. A proposal to electrify some portions at least of the railways in South India is also under the consideration of the Government.

Madras Hydro-electric Schemes.

The Chief Engineer has recently submitted Government detailed reports on the Pykhara-Hydro-Electric Development including a study from the financial standpoint.

An introductory report on the Papanasam Project has also been received.

Pykhara Project.

The main development differs very little from that described in the introductory report issued a few months ago. The estimates are, however, somewhat lower and the ultimate return on the invested capital more favourable.

Three schemes, *a*, *b* and *c*, have been submitted. The first two assume the electrification of certain sections of the South Indian Railway over a varying period of years, and the transmission of power to Madura, Trichinopoly, and Dindigul in addition to the Coimbatore area and the Nilgiris. The third scheme assumes that the South Indian Railway will decide not to electrify, and contemplates only the transmission of power to the Coimbatore area and the Nilgiris. None of the schemes includes Madras at the outset, but the Chief Engineer is of opinion that within a few years of the inauguration of an extensive hydro-electric-power service, it will have been found economically feasible to extend the transmission line to Madras.

If hydro-electric development is to be undertaken in this part of the Presidency on a scale comparable with the needs of industry and the public in general and, at the same time, operated on a round commercial basis, the revenue derived from the proposed railway load is absolutely necessary to help in covering operation and maintenance expenses during the first few years while the power market is being developed. Without the railway load, development must be along more modest lines and can only include the Coimbatore and Nilgiris area to begin with.

The Chief Engineer has kept the South Indian Railway authorities fully informed of the progress of the investigations and they appear to be generally in favour of a restricted electrification programme.

The Railway Board have, it is understood, referred the electrification plans of their Engineers together with the power proposals of the Madras Government to Messrs. Merz & Partners, Consulting Engineers, and their report is stil awaited. The extent, therefore, of the initial development of hydroelectric power in the areas under review may depend mainly upon the recommendations of Messrs. Merz & Partners to the Railway Board, and, until these are known, it is not possible to decide which of the three schemes is to be developed.

Such drawings and specifications are as common to all the three schemes are being prepared in order that no delay will take place, once the construction of one of the schemes is sanctioned. It should, however, be realized that on a project of such magnitude a considerable amount of labour and detailed work is necessary before the working plans and specifications can be completed.

Only preliminary survey, investigation of foundations, and similar studies have as yet been undertaken at Pykara, but Government have under consideration the question of the immediate construction of certain preparatory works which are common to all the schemes. Once the construction of these works is initiated, it will be possible in about a year to give a light and power service in the Nilgiris from the auxiliary construction plant.

The proposed rates for light and power as estimated by the Chief Engineer are attractive and, after a few years, a reduction can be anticipated. At the same time a satisfactory and increasing return on the capital invested seems reasonably assured.

Distribution.—Government are studying the possiblity of introducing regulations for the distribution and sale of electrical energy, whereby an electric service, at low rates, will be assured to the ultimate consumer and the power market properly developed. Such regulations would be based on those in force in most progressive countries, but modified to suit local conditions.

Pending decision of the Railway Board re: the electrification of the main line sections on the South Indian Railway, the Government have sanctioned the construction of a smaller scheme (The Glen Margen Hydro-Electric Scheme) at a cost of Rs. 12.80 lakhs and work on it is now in progress. Power is expected to be ready for supply from this auxiliary source from about the middle of 1929, and the area to be served will for the present be confined to Ootacamund, Coonoor, Wellington and the neighbouring tea estates.

Papanasam Project.

An introductory report on this development has been prepared by the Chief Engineer and is now being studied by Government. Sufficient information is available to base power costs and formulate tariffs for light and power. Before additional expenditure is incurred on investigations and studies in the field, or on plans and estimates, it is proposed to endeavour to obtain a definite guarantee of a fixed block of power, so that a certain revenue will be available while the potential and promising power market around Tinnevelly, Tuticorin and neighbouring districts is being developed. With this end in view, negotiations are now in progress with certain industrial interests.

Other Projects.

As soon as it is possible, certain other promising hydro-electric projects are to be studied in detail, while those of lesser importance will be carefully investigated and the details filed for future reference. It is the intention of Government in the course of time to prepare plans for a comprehensive electric power generation and

are being made to provide education for boys belonging to the Depressed Classes. The Council passed a resolution in the past year at the instance of a nominated member that poor girls reading in any educational institution in the province—Government, local fund, Municipal or aided—should be exempted from School fees in any Standard up to III Form. The total expenditure of the province on Education is in the neighbourhood of Rs. 452 lakhs. The principal educational institutions in the province are the Presidency College, the Christian College and Pachaiyappa's College, Madras; the St. Joseph's College, Trichinopoly; the Government College, Kumbakonam; the Government College, Rajamundry; the Maharaja's College, Trivandrum; the Agricultural College, Coimbatore; and the Medical and the Engineering Colleges at Madras.

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If hydro-electric development is to be undertaken in this part of the Presidency on a scale comparable with the needs of industry and the public in general and, at the same time, operated on a round commercial basis, the revenue derived from the proposed railway load is absolutely necessary to help in covering operation and maintenance expenses during the first few years while the power market is being developed. Without the railway load, development must be along more modest lines and can only include the Coimbatore and Nilgiris area to begin with.

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Other Projects.

As soon as it is possible, certain other promising hydro-electric projects are to be studied in detail, while those of lesser importance will be carefully investigated and the details filed for future reference. It is the intention of Government in the course of time to prepare plans for a comprehensive electric power generation and

are being made to provide education for boys belonging to the Depressed Classes. The Council passed a resolution in the past year at the instance of a nominated member that poor girls reading in any educational institution in the province—Government, local fund, Municipal or aided—should be exempted from School fees in any Standard up to III Form. The total expenditure of the province on Education is in the neighbourhood of Rs. 452 lakhs. The principal educational institutions in the province are the Presidency College, the Christian College and Pachaiyappa's College, Madras; the St. Joseph's College, Trichinopoly; the Government College, Kumbakonam; the Government College, Rajamundry; the Maharaja's College, Trivandrum; the Agricultural College, Coimbatore; and the Medical and the Engineering Colleges at Madras.

Cochin Harbour Scheme.

The Government of Madras and the authorities of the Cochin and Travancore States have come to an agreement regarding the financing of the Cochin Harbour scheme. The importance of this project lies in the fact that a good harbour at Cochin would lead to the development of a valuable hinterland which is at present far removed from any convenient port. The scheme is to cut a passage through the bar which blocks the entrance from the sea to an extensive backwater. A trial cut was made in 1923 and the effect of the monsoon thereon observed. The results recorded were examined by a committee of Harbour Engineers in England which reported favourably on the prospects of the scheme. The plant necessary for effecting a deeper and wider cut has been secured and the work is in progress. Everything had been prepared at Cochin for proceeding with the major works and with the arrival of the dredger and the pipe line on the lines of the Bombay plant work is progressing rapidly. During the working season of 1927-28 the first part of the channel across the bar has been completed. The channel is 11,026 feet long and 400 feet wide. The depth of the outer half is from 34 to 35 feet L. W. O. S. T. and of the inner half from 30 to 32 feet at L. W. Small steamers have entered the backwater during the S. W. monsoon period of 1928. If access through the bar can be established at all periods of the year, a portion of the backwater will be dredged to afford anchorage for ocean-going steamers.

Vizagapatam Harbour Project.

Even more pregnant with future possibilities is the scheme for the development of the Vizagapatam harbour. Proposals for the development of the port at this place have been under consideration since 1859; but the success of the project is bound up with the construction of direct railway communication between Vizagapatam and the Central Provinces; for the quantity of trade which could be obtained from the littoral itself is insufficient to justify the capital expenditure which would be required. In May 1925 the Government of India declared Vizagapatam a major port thereby enabling the development of the port under the directions of the Central Government. Preliminary operations commenced in the end of the year and were continued vigorously in 1926 with the aid of dredgers and rock-breakers. It is expected that the construction of the harbour will take four or five years. The surrounding hill-sides and adjacent areas will meanwhile be developed for industrial, trading and residential purposes.

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transmission system, embracing the whole of the Madras Presidency, which will be gradually developed as funds become available.

The increasing number of electric supply undertakings throughout the Presidency has necessitated the construction of an up-to-date electric testing laboratory for the electrical inspector to Government at a cost of nearly Rs. 80,000.

Co-operation.

The progress made by the Co-operative Department, both in the formation of new societies and the development of those registrerd in previous years has been very satisfactory. There was a very large increase, during the year, in the number of members and in the amount of share capital, of working capital and of reserve fund. The steadily increasing efficiency of many of the local supervising unions gave evidence of the success of the policy adopted by Government of transferring, within statutory limits, the control of primary societies to non-official organisations wherever such a course was practicable. Some noteworthy features of the Co-operative movement during the year were the increased activities of the building societies stimulated by financial help from Government; a marked development in the organisation of labour societies, and an increase in the number of societies formed by cultivators to enable them to hold up their crops for a favourable market and for the joint sale of their produce. The co-operative movement also made satisfactory progress among the depressed classes during the year. A Committee which was appointed to inquire into the progress of the Co-operative movement and suggest in what ways and on what lines the movement may be still further carried on have since submitted their report which is now under the consideration of Government.

Social Legislation.

An advanced piece of social legislation which has caused considerable excitement in the Presidency is the Hindu Religious Endowments Act. It has for its object the better administration and governance of certain Hindu religous endowments. It provides for the appropriation of the surplus funds of the endowments to religious, educational and charitable purposes not inconsistent with the objects of the institutions to which they are attached. The measure entailed a considerable amount of correspondence with the Government of Madras; the Governor of Madras found himself unable to assent to the Bill as originally passed, and returned it for re-consideration, recommending certain amendments which the Council accepted. The Act came into force early in 1925 and has been working satisfactorily notwithstanding the obstacle placed in its way by the orthodox section of the Hindu community. The latter are striving their utmost to put technical and other obstacles in the way of its smooth working and are making much of the suggestion thrown out by the Governor-General while giving his assent to the Bill, namely, that some of its defects might be remedied in the light of experience. Doubts having been raised to the validity of the act It was reenected and passed into lawas Act No. II of 1927. The new Act came into force on 8th February 1927. Another piece of legislation—a non-official Bill—which has raised a heated controversy is the Malabar Tenancy Bill, which aims to confer, subject to certain conditions, occupancy rights on "kanom" tenants and actual cultivators of the soil. As there was a sharp difference of opinion on the very principles of the Bill, the Governor withheld his assent and a committee was appointed to go into the matter thoroughly and its findings have been submitted and the same have been published with a view to receive objections and suggestions. Noteworthy amongst other efforts at legislation for social reform was the non-official resolution passed by the Council recommending to Government to undertake legislation or to ask the Government of India to do so to put a stop to the practice of dedicating young women and girls to Hindu temples for immoral purposes under the pretext of caste, custom or religion. It was also resolved to ask Government to fix as their goal local prohibition of drink in the presidency within 20 years.

Law and Order.

The Superior Court for Civil and Criminal judicial work in the Presidency isthe High Court at Madras, which consists of a Chief Justice and eleven puisne judges. The existing law provides for a maximum of 20 High Court Judges. For the administration of criminal justice there are 26 Session Judges in the Mufassal Additional and Assistant Sessions Judges being provided to assist Courts in which the work is heavy. Then there are the District Magistrates, the Subordinate Magistrates and Honorary Magistrates. The administration of civil justice is carried on by 26 District Judges, and 37 Subordinate Judges and 153 District Munsiffs. In the Presidency Town there are a City Civil Court consisting of one Judge and Small Causes Court consisting of a Chief Judge and two other Judges. Madras is a litigious province and the records show one suit for every 71 persons. The Police department is under an Inspector-General who has four deputies in four ranges of the Presidency, a Superintendent being stationed at each District. The sanctioned strength of the permanent police force is about 27,700.

FINANCE DEPARTMENT.

Heads of Accounts.	Budget Estimates, 1928-29.	Heads of Accounts.	Budget Estimates, 1928-29.
Revenue.	Rs.	Expenditure.	Rs.
II—Taxes on Income ..	6,50,000	5—Land Revenue	35,13,700
		6—Excise	44,54,500
V—Land Revenue ..	7,54,18,800	7—Stamps	7,15,300
		8—Forest	46,87,500
VI—Excise	5,24,28,600	8A—Forest Capital outlay charged to Revenue	4,90,500
VII—Stamps	2,53,26,300	9—Registration	27,09,700

Heads of Accounts.	Budget Estimates, 1928-29.
Revenue—*contd.*	Rs.
VIII—Forest	51,92,000
IX—Registration	35,12,100
XIII—Irrigation, Navigation, Embankment and Drainage Works for which Capital Accounts are kept.	51,53,800
XIV—Irrigation, Navigation, Embankment and Drainage Works for which no Capital Accounts are kept	1,69,700
XVI—Interest	33,81,400
XVII—Administration of Justice	12,88,300
XVIII Jails and Convict Settlements	10,81,700
XIX—Police	11,27,600
XXI—Education	6,43,600
XXII—Medical	7,35,500
XXIII—Public Health ..	1,68,900
XXIV—Agriculture	3,23,100
XXV—Industries	7,10,800
XXVI—Miscellaneous Departments	4,51,100
XXX—Civil Works	8,08,000
XXXIII—Receipts in aid of Superannuation ..	3,64,900
XXXIV—Stationery and Printing	2,85,300
XXXV—Miscellaneous ..	8,31,000
(*a*) Total—Revenue ..	16,97,44,900
Famine Insurance Fund	6,59,200
Loans and advances by Provincial Government	37,54,500
Advances from the Provincial Loans Fund, Government of India	1,45,00,000
Appropriations for Reduction or Avoidance of Debt	45,66,000
Suspense	6,86,800
Depreciation Funds	1,40,000
	2,43,06,500
(*a*)+(*b*) Total—Receipts ..	19,40,51,400
Opening Balance { Famine Insurance Fund	37,61,871
Opening Balance { General Balances ..	3,57,10,914
Grand Total	23,35,24,185

Heads of Accounts.	Budget Estimates, 1928-29.
Expenditure—*contd.*	Rs.
15—Irrigation—Other Revenue Expenditure Financed from Ordinary Revenues	59,06,300
16—Construction of Irrigation, Navigation, Embankment and Drainage Works	54,500
19—Interest on Ordinary Debt	68,35,300
20— Do. on other obligations.	3,100
21—Reduction or Avoidance of Debt	45,66,000
22—General Administration ..	2,51,66,500
24—Administration of Justice.	1,00,19,500
25—Jails and Convict Settlements	33,70,800
26—Police	1,94,54,500
27—Ports and Pilotage ..	34,400
30—Scientific Departments ..	4,04,100
31—Education	2,43,82,300
32—Medical	89,86,100
33—Public Health	47,82,700
34—Agriculture	38,76,200
35—Industries	23,12,700
37—Miscellaneous Departments	24,63,400
41—Civil Works	2,22,18,000
43—Famine Relief and Insurance	6,61,000
45—Superannuation Allowances and Pensions	59,45,400
46—Stationery and Printing ..	21,04,500
47—Miscellaneous	4,56,200
Total — Expenditure Charged to Revenue..	17,05,74,700
Expenditure not Charged to Revenue.	
52A—Capital outlay on Forests.	—64,100
55—Construction of Irrigation, Navigation, Embankment and Drainage Works	1,46,09,100
56C—Capital outlay on Industrial Development ..	2,35,600
56D—Capital outlay on Hydro-Electric Schemes ..	10,00,000
60—Civil Works— not charged to Revenue	93,600
60B—Payment of commuted value of Pensions ..	10,62,700
Total — Expenditure not Charged to Revenue...	1,69,36,900
Loans and Advances by Provincial Government	79,23,100
Advances from Provincial Loans Fund, Government of India ..	45,66,000
Suspense	6,86,800
Depreciation Funds	24,300
Total—Disbursements ..	20,07,11,800
Closing Balance { Famine Insurance Fund	44,21,071
Closing Balance { General Balances ..	2,83,91,314
Grand Total ..	23,35,24,158

Governor.

His Excellency the Right Hon. Viscount Goschen, G.C.I.E., C.B.E.

Personal Staff.

Private Secretary, T. Green, I.C.S.

Military Secy., Major H. F. C. Hobbs.

Surgeon, Major D. P. Johnstone, R.A.M.C.

Aides-de-Camp, Lieut. Maurice Alan Fremantle, Lieut. Henry Alleyene Lash and Lt. James Richard Longfield.

Extra Aide-de-Camp, Captain George Gerrard Goschen.

Indian Aide-de-Camp, Lieut. Hamir Singh Bahadur.

Commandant, H. E. the Governor's Body Guard, Major T. N. Watson, M.V.O.M.C.

Members of Council.

The Hon. Sir Norman E. Marjoribanks, K.C.I.E., C.S.I., I.C.S.

" Khan Bahadur Muhammad Usman Sahib Bahadur.

" T. E. Moir, C.S.I., C.I.E., I.C.S.

" Dewan Bahadur M. Krishnan Nair.

Ministers.

Dr. P. Subbarayan, Bar-at-Law (Education and Development).

S. Muthia Mudaliar (Local Self-Government, Medicine and Public Health).

M. R. Seturatnam Iyer, (Public Works).

SECRETARIES TO GOVERNMENT.

Chief Secretary, H. G. Stokes, C.I.E., I.C.S.

Secretary, Finance Department, H. A. Watson, I.C.S.

Secretary, Local Self-Government Department, C. W. E. Cotton, C.I.E., I.C.S.

Chief Engineer, Public Works Department (Buildings and Roads), R. F. Stoney.

Chief Engineer Public Works Department, Irrigation), L. H. Grey.

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction, Richard Littlehailes, M.A. (on deputation).

Inspector-General of Police, F. A. Hamilton.

Surgeon-General, Major-General F. H. G. Hutchinson, C.I.E., M.B., I.M.S.

Director of Public Health, Lt.-Colonel A. J. H. Russell, M.A., M.D., I.M.S.

Accountant-General, N. V. Raghavan, B.A.

Inspector-General of Prisons, Lt.-Colonel John Phillip Cameron, I.M.S.

Postmaster-General, C. H. Malan, I.C.S

Collector of Customs, T. A. Stewart, C.I.E.

Commissioner of Excise, C. B. Cotterell, C.I.E., I.C.S.

Inspector-General of Registration, E. H. M. Bower.

Acting Director, Kodaikanal Observatory, Thomas Royds.

Supdt., Govt. Central Museum, and Principal Librarian, Connemara Public Library, Dr. F. H. Gravely.

Director of Agriculture, R. D. Anstead, M.A.

Director of Fisheries, Dr. B. Sundara Raj.

Chief Conservator of Forests, R. D. Richmond.

Presidents and Governors of Fort St. George in Madras.

William Gyfford 1684
Elihu Yale 1687
Nathaniel Higginson 1692
Thomas Pitt 1698
Gulston Addison 1709

Died at Madras, 17 Oct., 1709.

Edmund Montague (*Acting*) 1709
William Fraser (*Acting*) 1709
Edward Harrison 1710
Joseph Collet 1711
Francis Hastings (*Acting*) 1727
Nathaniel Elwick 1727
James Macrae 1725
George Morton Pitt 1730
Richard Benyon 1735
Nicholas Morse 1744
John Hinde .. ..
Charles Floyer 1747
Thomas Saunders 1750
George Pigot 1755
Robert Palk 1763
Charles Bourchier 1767
Josias DuPre 1770
Alexander Wynch 1773
Lord Pigot (Suspended) 1775
George Stratton 1776
John Whitehill (*Acting*) 1777
Sir Thomas Rumbord, Bart. 1778
John Whitehill (*Acting*) 1780
Charles Smith (*Acting*) 1780
Lord Macartney, K.B. 1781

Governors of Madras.

Lord Macartney, K.B. 1785
Alexander Davidson (*Acting*) 1785
Major-General Sir Archibald Campbell, K.B. 1786
John Hollond (*Acting*) 1789
Edward J. Hollond (*Acting*) 1790
Major-General William Medows 1790
Sir Charles Oakeley, Bart. 1792
Lord Hobart 1794
Major-General George Harris (*Acting*) .. 1798
Lord Clive 1799
Lord William Cavendish Bentinck .. 1803
William Petrie (*Acting*) 1807
Sir George Hilaro Barlow, Bart., K.B. .. 1807
Lieut.-General the Hon. John Abercromby. 1813
The Right Hon. Hugh Elliot 1814
Major-General Sir Thomas Munro, Bart., K.C.B. Died 6 July, 1827. 1820
Henry Sullivan Grœme (*Acting*) .. 1827
Stephen Rumbold Lushington 1827
Lieut.-General Sir Frederick Adam, K.C.B. 1832
George Edward Russell (*Acting*) 1837
Lord Elphinstone, G.C.H., P.C. 1837
Lieut.-General the Marquess of Tweeddale, KT., C.B. 1842
Henry Dickinson (*Acting*) 1848
Major-General the Right Hon. Sir Henry Pottinger, Bart., G.C.B. 1848
Daniel Eliott (*Acting*) 1854
Lord Harris 1854
Sir Charles Edward Trevelyan, K.C.B. .. 1859
William Ambrose Morehead (*Acting*) .. 1860
Sir Henry George Ward, G.C.M.G. .. 1860
Died at Madras, 2 August, 1860.
William Ambrose Morehead (*Acting*) .. 1860
Sir William Thomas Denison, K.C.B. .. 1861
Acting Viceroy, 1863 to 1864.
Edward Maltby (*Acting*) 1863
Lord Napier of Merchistoun, KT. (*a*) .. 1866
Acting Viceroy.
Alexander John Arbuthnot, C.S.I. (*Acting*) 1872
Lord Hobart 1872
Died at Madras, 27 April, 1875.
William Rose Robinson, C.S.I. (*Acting*) .. 1875
The Duke of Buckingham and Chandos .. 1875
The Right Hon. W. P. Adam 1880
Died at Ootacamund, 24 May, 1881.
William Hudleston (*Acting*) 1881
The Right Hon. M. E. Grant Duff .. 1881
The Right Hon. Robert Bourke, P.C. .. 1886
Lord Connemara, 12 May, 1887 (by creation.)
John Henry Garstin, C.S.I. (*Acting*) .. 1890
Baron Wenlock 1891
Sir Arthur Elibank Havelock, G.C.M.G. .. 1896
Baron Ampthill 1900
Acting Viceroy and Governor-General, 1904.
James Thomson, C.S.I. (*Acting*) 1900
Gabriel Stokes, C.S.I. (*Acting*) 1906
Hon. Sir Arthur Lawley, K.C.M.G., G.C.I.E. 1906
Sir Thomas David Gibson-Carmichael, Bart., K.C.M.G., G.C.I.E. (*b*) 1911
Became Governor of Bengal, 1 April 1912
Sir Murray Hammick, K.C.S.I., C.I.E. (*Acting*). 1912
Right Hon. Baron Pentland, P.C., G.C.I.E. 1912
Baron Willingdon 1918
Lord Goschen 1924

(*a*) Afterwards (by creation) Baron Napier of Ettrick.

(*b*) Afterwards (by creation) Baron Carmichael of Skirling.

MADRAS LEGISLATIVE COUNCIL.

PRESIDENT.

The Hon. Rao Bahadur C. V. S. Narasimha Raju Garu.

I.—MEMBERS OF THE EXECUTIVE COUNCIL.

Ex-Officio.

The Hon. Sir Norman E. Marjoribanks, K.C.I.E., C.S.I., I.C.S.
The Hon. Khan Bahadur Muhammad Usman Sahib Bahadur.
The Hon. Mr. T. E. Moir, C.S.I., C.I.E., I.C.S.
The Hon. Dewan Bahadur M. Krishnan Nair.

II.—ELECTED MEMBERS

(a) Ministers.

The Hon. Dr. P. Subbarayan, Bar-at-Law.
The Hon. Mr. M. R. Seturatnam Ayer.
The Hon. S. Muthiah Mudaliar.

(b) Other Members.

M. R. Ry. Sami Venkatachalam Chetti Garu.
M. R. Ry. Chittoor Srinivasa Govindaraya Mudaliyar Avargal.
M. R. Ry. B. S. Mallayya Avargal.
M. R. Ry. P. Bhaktavatsulu Nayudu Garu.
M. R. Ry. Laguduva Kuppier Tulasiram Avargal.
M. R. Ry. Ummaheswara Ayyar Ramaswami Ayyar Avargal.
M. R. Ry. Chavali Rama Somayajulu Garu.
M. R. Ry. Ankitam Venkata Bhanoji Rao Garu.
M. R. Ry. Tinnevelly Chavadi Kuthanainar Pillai Subrahmanya Pillai Avargal.
M. R. Ry. Chinnapalamada Obi Reddi Garu.
M. R. Ry. Battini Narayana Reddi Garu.
M. R. Ry. T. Adinarayana Chettiyar Avargal.
M. R. Ry. M. A. Manikkavelu Nayakar Avargal.
M. R. Ry. Coya Venkatarangam Nayudu Garu.
M. R. Ry. Kayappakkam Sitarama Reddiyar Avargal.
M. R. Ry. Ramanuja Srinivasa Ayyangar Avargal.
M. R. Ry. Kannuswami Padayachi Ramachandra Padayachi Avargal.
M. R. Ry. Arcot Ranganatha Mudalyar Avargal.
M. R. Ry. Pulamati Siva Rao Garu.
M. R. Ry. Kallipattu Krishnaswami Nayakar Avargal.
M. R. Ry. Chembarambakkam Nattu Muthuranga Mudalyar Avargal.
M. R. Ry. Rao Bahadur Bollini Muniswami Nayudu Garu.
M. R. Ry. Comandur Ramakrishnarajupet Parthasarathi Ayyangar Avargal.
M. R. Ry. Rao Bahadur Conjeeveram Sadasiva Mudaliyar Ratnasabhapati Mudliar Avargal.
M. R. Ry. Sangarandampalaiyam Vanavudaiya Goundar Vanavudaiya Goundear Avargal.
M. R. Ry. Coimbatore Venkatesa Ayyangar Venkataramana Ayyangar Avargal.
M. R. Ry. K. Koti Reddi Garu.
M. R. Ry. Arcot Parasurama Rao Garu.
Sriman Biswanath Das Mahasyo.
M. R. Ry. Varada Kameswara Rao Nayudu Garu.
The Hon'ble Rao Bahadur Sir Annepu Parasuramdoss Patro, Kt.
M. R. Ry. Kandula Veeraraghavaswami Garu.
M. R. Ry. Bikani Venkataratnam Garu.
M. R. Ry. Dandu Narayana Raju Garu.
M. R. Ry. Mothay Narayana Rao Garu.
M. R. Ry. Jagarlamoody Kuppuswamy Garu.
M. R. Ry. Diwan Bahadur Paidupati Cooresooloo Nayudu Ethirajulu Nayudu Garu.
M. R. Ry. Pillalamarri Anjaneyulu Pantulu Garu.
M. R. Ry. Attavar Balakrishna Chetty Avargal.
M. R. Ry. Kota Ramakrishna Karant Avargal.

ELECTED MEMBERS—(*contd.*)

M. R. Ry. Mirjapuram Raja Garu *alias* Venkataramayya Apparao Bahadur Garu.
M. R. Ry. Ayyadevara Kaleshwara Rao Garu.
M. R. Ry. G. Harisarvothama Rao Garu.
M. R. Ry. Konatham Sarabha Beddi Garu.
M. R. Ry. Ponnambala Tyaga Ranjan Avargal.
M. R. Ry. Kadayam Ramabhadra Ayyar Venkatarama Ayyar Avargal.
M. R. Ry. Vadamalai Tiruvanatha Sevuga Pandiya Tevar Avargal, Zamindar.
M. R. Ry. Karuthodiyil Madhavan Nayar Avargal.
M. R. Ry. Diwan Bahadur Mannath Krishnan Nayar Avargal.
M. R. Ry. Venkatagiri Kumara Raja Velugoti Sarvagnya Kumara Krishnayachandra Bahadur Garu.
M. R. Ry. Bezwada Ramachandra Reddi Garu.
M. R. Ry. Diwan Bahadur Arunachala Murugappa Murugappay Chettiyar Avargal.
M. R. Ry. Tirupullani Chellam Ayyangar Srinivasa Ayyangar Avargal.
M. R. Ry. Dharmalinga Appavu Chettiar Avargal.
M. R. Ry. Rao Sahib Sankaram Chettiyar Ellappa Chettiyar Avargal.
M. R. Ry. S. Muthia Mudaliyar Avargal.
M. R. Ry. C. Marudavanam Pillai Avargal.
M. R. Ry. K. S. Sivasubramania Ayyar Avargal.
M. R. Ry. Diwan Bahadur Subbarayaulu Kumaraswami Reddiyar Avargal.
M. R. Ry. Tenkasi Kilangadu Chidambaranatha Mudalyar Avargal.
M. R. Ry. Trichinopoly Mookapillai Narayanaswami Pillai Avargal.
M. R. Ry. Manatattai Rangatnam Ayyar Seturatnam Ayyar Avargal.
M. R. Ry. Pusapati Cumara Venkatapathi Raju Garu.
M. R. Ry. Rao Bahadur Chintapati Venkata Surya Narasimha Raju Garu.
M. R. Ry. Hoobbatalai Belli Gowder Ari Gowder Avargal.
Abdul Hamid Khan Sahib Bahadur.
Abbas Ali Sahib Bahadur.
Janab Munshi Abdul Wahab Sahib Bahadur.
Mohamad Khadir Sahib Mohideen Sahib Bahadur.
Janab K. Abdul Hye Sahib Bahadur.
Saidapet Khadir Hussain Abdul Razack Sahib, Khan Bahadur.
Basheer Ahmad Sayeed Sahib Bahadur.
Syed Tajudin Sahib Bahadur.
K. P. V. S. Muhammad Meera Rowther Bahadur.
Nattam Dubash Kadir Sahib Syed Ibrahim Sahib Bahadur.
Kottal Uppi Sahib Bahadur.
T. M. Moidoo Sahib Bahadur.
Muhammad S'Chamnad Sahib Bahadur.
M. R. Ry. V. Ch. John Avargal.
Mr. Jerome Antony Saldanha.
M. R. Ry. Savarimuttu Arpudaswami Udayar Avargal.
M. R. Ry. Daniel Thomas Avargal.
Sir Alexander MacDougall, KT.
Mr. John Albert Davis.
Sri Ramachandra Madraraja Deo, Zamindar of Kallikota and Attagada Estates.
Srimannarayana Appa Rao Bahadur Garu, Meka, Zamindar of Gallopalli.

ELECTED MEMBERS—(*concld.*)

The Hon'ble Sir Panaganti Ramarayaningar, Raja of Panagal.

M. R. Ry. Baskara Rajarajeswara Setupati *alias* Muthuramalinga Setupati Avargal, Raja of Ramnad.

M. R. Ry. Kumaran Raman *alias* Kavalappara Moopil Nayar Avargal.

M. R. Ry. S. Satyamurthi Avargal.

Mr. Cecil Ralph Townshend Congreve

Mr. Charles Edgar Wood.

Mr. Kenneth Kay.

Mr. J. Mackenzie Smith.

M. R. Ry. Chengalath Gopal Menon Avargal.

M. R. Ry. Alagappa Chettiyar Arunachalam Chettiyar Narayanan Chettiyar Avargal.

NOMINATED MEMBERS.

M. R. Ry. Madras Varadaraja Gongadhara Siva Avargal, Medical Practitioner, Cuddapah.

M. R. Ry. Lakkepogu Cotappah Guruswami Avargal.

M. R. Ry. Vellesa Iyyaswami Muniswami Pillai Avargal, Ootacamund.

M. R. Ry. Gudipati Premayya Garu.

M. R. Ry. Rao Bahadur Mylai Chinnathambi Rajah Avargal.

Swami Sahajanandam, Nandanar School, Chidambaram.

M. R. Ry. Namasivayam Siva Raj Avargal, B.A., B.L., Madras.

M. R. Ry. Rao Sahib Retamalay Srinivasan Avargal.

M. R. Ry. Sappanai Mooppanar Subrahmanya Mooppanar Avargal, Headman of Chintamani, Trichinopoly Fort.

M. R. Ry. Rao Sahib Parasurama Venkatachala Subbaraya Sundaramurti Pillai Avargal.

Maharaja Sir Ramachandra Deo, Raja of Jeypore.

Dr. (Mrs.) Muthulakshmi Ammal.

M. R. Ry. Jakkamsetti Bheemiah Garu, Member, District Board, West Godavari.

M. R. Ry. S. N. Dorai Rajah Avargal of Pudukkottai, Trichinpoly.

M. R. Ry. Ramanatha Goenka Avargal, The Bombay Company, Madras.

M. R. Ry. Rao Sahib Midattala Hampayya Garu, Guntakal.

M. R. Ry. Kotieth Krishnan Avargal, B.A., B.L., Tellicherry.

M. R. Ry. R. Gaganna Gowd Garu, Hospet.

Subadar Major Nanjappa, late 61st Pioneers, Salem.

M. R. Ry. Rao Bahadur Olappamanna Manakkal Narayanan Nambudripad Avargal.

M. R. Ry. W. P. A. Soundara Pandya Nadar Avargal.

Khan Bahadur Muhammad Bazi-ullah Sahib Bahadur, C.I.E., O.B.E., Director of Industries.

Mr. Harold Argyl Watson, I.C.S., Secretary to Government, Finance Department.

Mr. Cecil Bernard Cotterell, C.I.E., I.C.S., Secretary to Government, Local Self-Government Department, Acting Second Secretary to Government.

Mr. A. M. Coomara Swami Tanipar, I.C.S., Secretary to Government, Development Department

M. R. Ry. Gnanavaram Pillai, P. J., Negapatam.

The Bengal Presidency.

The Presidency of Bengal, as constituted on the 1st April 1912, comprises the Burdwan and Presidency divisions and the district of Darjeeling, which were formerly administered by the Lieutenant-Governor of Bengal; and the Rajshahi, Dacca and Chittagong divisions which by the partition of the old Province had been placed under the administration of the Lieutenant-Governor of Eastern Bengal and Assam. The area of the Presidency is 82,277 square miles, and it possesses a population of 47,592,462 persons; included within this area are the two Indian States of Cooch Behar and Tripura; which are now placed in direct political relations with the Government of India. The Governor of Bengal in Council acts as Agent to the Governor-General of India for these States. The area of the British territory is 76,843 square miles. Bengal comprises the lower valleys and deltas of the Ganges and Brahmaputra, and in the main consists of a great alluvial plain intersected in its southern portion by innumerable waterways. In the north are the Himalayan mountains and submontane tracts of Darjeeling and Jalpaiguri, and on the south-east the hills in Tripura and Chittagong, while on the west the Chota Nagpur plateau is continued by an undulating tract running through the western portions of Midnapur, Bankura, Burdwan and Birbhum. The general range of the country however is very low, and a great fertile plain extends southward from Jalpaiguri to the forests and swamps known as the Sunderbans, which lie between the area of cultivation and the Bay of Bengal.

The People.

Of the inhabitants of the Presidency 25,486,124 or 53·55 per cent. are Mahomedans and 20,809,148 Hindus. These two major religions embrace all, but 2·73 per cent. of the population, Christians, Buddhists and Animists combined, number 1,273,873.

Bengali is spoken by ninety-two per cent. of the population of the Presidency and Hindi and Urdu by 3·8 per cent. The Oriya-speaking people number 298,372 and Nepali is the tongue of 93,060 persons principally residents in the Darjeeling and Jalpaiguri districts. The great majority of the speakers of the Munda languages are Santals in West and North Bengal.

Industries.

According to the returns of the Census of 1921 nearly 37 millions or over 77 per cent. of the population derive their support from pasture and agriculture, and of these more than 30½ millions are cultivators, and more than 4½ millions farm servants and field labourers. The area under jute in 1927 is estimated at 2,962,100 acres against 3,363,900 in 1926. Bengal is the most important rice-producing area in Northern India, and it is computed that 84 per cent. of the cultivated area of the Presidency is devoted to its production. Other crops include barley, wheat, pulses and oil-seeds, the area devoted to the last named in 1926-27 being 1,097,000 acres. Sugar is produced both from the sugar-cane and from the date-palm, and tobacco is grown for local consumption in nearly every district of Bengal. The area under tea in 1926 was 194,700 acres. There were 370 plantations employing a daily average of 165,179 permanent and 10,343 temporary hands.

Manufacture and Trade.

The main industries in this part of India in addition to the agricultural industry are the jute mill industry, the tea industry (largely an Assam industry) and coal mining. The jute mills in and around Calcutta constitute the principal manufacturing industry of the Presidency. From 1st April to 31st December 1921 all jute mills worked four days per week. From 1st January to 31st March 1923, multiple shift mills worked four days of 13½ hours each per week, single shift mills five days per week, namely four days of 11 hours each and one day of 10 hours. There were 85 mills at work during the year 1924-25 with 49,780 looms and 1,053,821 spindles. The average number of persons employed daily was 3,36,936. The labour supply of mills during the year has been fair, but there have been many days lost through strikes at different mills. The value of the exports of Raw Jute by sea from Calcutta during 1926-27 increased from Rs. 55,90 lakhs to Rs. 78,65 lakhs. Helped by more stable conditions at home and abroad, a steady exchange and good crops, Bengal enjoyed a year of steady trade progress. While the actual volume of the import trade increased by more than 10 per cent. the export side saw record shipments of jute and sustained exports at higher prices of shellac, tea and hides. The United Kingdom is responsible for 36 per cent. of the total trade of Calcutta, the United States 16 per cent., Germany 7 per cent. and Japan 4 per cent. Of the import trade, the United Kingdom improved her share by a point to 57 per cent. the United States and Japan maintened theirs at 7 per cent. and 6 per cent. respectively, but Germany's share dropped below 5 per cent. Exports to the United Kingdom increased nearly 3 points to 24 per cent., exports to the United States dropped a point to 21 per cent. and Germany's takings increased by a point to 8 per cent. Kerosene imports from Burma were down by 24 per cent.; imports from America were the same as last year. The province, however, bought 8,400,000 gallons of kerosene from Russia. Jute exports surpassed all previous records, but as prices ruled lower, the monetary figures actually show a slight decrease. Exports to the United Kingdom showed a marked improvement. Imports of motor cars from the United Kingkom increased by 42 per cent. and from America by 44 per cent. The figures for cotton goods show a rise in the quantity of imports by 11 per cent. and in value by 3 per cent. This rise is mainly due to the healthy conditions of the trade that prevailed towards the end of the last financial year (1926-27). Indian mills took advantage of the cheaper cotton prevailing at the end of the last financial year (1926-27) and put through a substantial amount of profitable business. The low purchasing power of Bengal was attracted to the cheaper class of goods and the Province did large business in the Grey Section of the trade. The tea industry enjoyed another satisfactory season. Calcutta shipments to foreign ports comprised 153 million lbs. consigned direct from gardens and 85 million lbs. of tea marketed in Calcutta as compared with 153 million and 75 million lbs in the previous year. Exports coastwise rose from 5·70 million to 6·44 million lbs. Exports

of tea waste improved from 1·41 millions lbs. to 3.91 million lbs., the United States taking the bulk of the shipments. Coal exports to foreign ports were fairly satisfactory for, though the total was slightly less than last year, the 1926 figures were swelled by exceptional shipments rendered possible by the prolonged strike in the British coal-trade. These were registered under "other countries" and consisted mainly of shipments to the United Kingdom, Aden, and Egypt. The Principal shipments under this head during the current year were 46,000 tons to the Philippines, 26,000 tons to Hong-Kong and 13,000 tons to Sumatra.

In 1926-27 the foreign sea-borne trade of Bengal (excluding treasure but including Government stores) amounted to Rs. 259 crores of which 89 crores represented imports and Rs. 126 crores exports. Of the total foreign trade of Bengal, over 90 per cent. was the share of Calcutta. The six chief exports from Bengal are in order of importance; jute (raw and manufactured), tea, lac, hides and skins (raw seeds, grain, pulse and flour) and the six leading imports are cotton goods, metals and ores, sugar, machinery and millwork, railway plant and rolling stock, and oils.

Administration.

The present form of administration in Bengal dates from January 1921. In 1912 the Government of the Province underwent an important change, when, in accordance with the Proclamation of His Majesty the King-Emperor at Delhi, the Province was raised from the status of a Lieutenant-Governor to that of a Governor-in-Council, thus bringing it into line with the Presidencies of Madras and Bombay. In 1921, under the Reform Scheme, the Local Government was reconstituted, certain of the departments being placed under the control of Ministers appointed from among elected members of the Legislative Council. There are normally four members of the Executive Council, who are in charge of the "reserved subjects," and three Ministers, who are in charge of the "transferred subjects," but in 1924, owing to political reasons, there were only two ministers, and these had to resign owing to the refusal of the Legislative Council to vote their salaries. On their resignation, the transferred subjects were carried on by the members of the Executive Council. Two ministers were appointed by H. E. the Governor in March 1925 for the administration of the transferred subjects, but owing to the refusal of the Legislative Council to vote their salaries they resigned their offices in the same month. The administration of transferred subjects was thereupon assumed by H. E. the Governor of Bengal and subsequently the Secretary of State ordered the suspension of transfer of all transferred subjects in Bengal until the 21st January 1927. In the course of 1927, two Ministers were again appointed. This time the salaries were voted by a small majority and since then the administration has been carried on as originally intended.

Bengal is administered by five Commissioners, the divisions being those of the Presidency, Burdwan, Rajshahi, Dacca and Chittagong. The unit of administration is the District Magistrate and Collector. As Collector he supervises the ingathering of the revenue and is the head of all the Departments connected with it, while as District Magistrate he is responsible for the administration of criminal justice in the district. The immediate superior of the District Magistrate is the Divisional Commissioner. Commissioners are the channels of communication between the local officers and the Government. In certain revenue matters they are, in their turn, subject to the Board of Revenue in Calcutta; in other matters they are under the direct control of Government.

Justice.

The administration of Justice is entrusted to the High Court of Calcutta which consists of the Chief Justice who is a Barrister and 16 Puisne judges including two additional judges who are Barristers, Civilians or Vakils. Below the High Court are the District and Additional Judges, the Small Causes Court and Subordinate Judges and Munsiffs. Of these officers, the District and Additional Judges and a certain number of subordinate Judges are also endowed with the powers of a Criminal Court while the remainder have jurisdiction in Civil matters only. Criminal Justice is administered by the High Court, the Courts of Session and the Courts of the various classes of Magistrates. On its appellate side, the High Court disposes of appeals from the order of a Court of Session, and it also confirms, modifies or annuls sentences of death passed by Sessions Courts. Calcutta has five Presidency Magistrates including a Temporary Magistrate, two Municipal Magistrates and also a number of Honorary Magistrates and it possesses a Court of Small Causes with Judges who dispose of cases of the class that are usually heard in County Courts in England.

In addition a number of Union Benches and Courts have been established in selected rural areas for the disposal by honorary agency of petty criminal cases and civil disputes.

Local Self-Government.

By Bengal Act III of 1884 which regulates municipal bodies in the interior and its subsequent amendments the powers of Commissioners of municipalities have been increased and the elective franchise has been extended. Municipal expenditure now comprises a large number of objects, including veterinary institutions, employment of Health Officers and Sanitary Inspectors and the training and employment of female medical practitioners. The Commissioners also have large powers in regard to the water-supply and the regulation of buildings. The municipal Government of Calcutta is governed by Act III of 1923. This Act, which replaced Act III of 1899, makes the Corporation paramount in matters relating to municipal administration. The Act provides for the appointment of a Mayor, who replaces the Chairman of the old Act, a Deputy Mayor, an Executive Officer, and Deputy Executive Officers, all elected by the Corporation. The appointment of the Chief Executive Officer is subject to the approval of Government. The total number of councillors is 85, with 5 aldermen, elected by the councillors. Ten of the councillors are nominated by Government, and by the general or special constituencies. There are separate constituencies for Mahommedans.

In order to improve the insanitary and congested areas of the city, the Calcutta Improvement Trust has been created with extensive powers. In the mofussil, District and Local Boards exercise considerable powers, with regard to Public Works, Education and Medical relief and Union Committees have been formed which deal for the most part with the control of village roads, sanitation and water-supply.

Bengal Act V of 1919 introduced the new system of self-government by a creation of village authorities vested with the power and duties necessary for the management of village affairs and entrusted with powers of self-taxation. The new village authority, called the Union Board, replaces, the old Chaukidari *panchayats* and the Union Committee and deal with the village police, village roads, water supply, sanitation, primary schools and dispensaries. The Act also empowers Government to create out of the members of the Union Boards Village Benches and Courts for the trial of petty criminal and civil cases arising within the union. The Act has been extended to all Districts in the Presidency except Darjeeling, and in 1927 over 4,000 Union Boards were sanctioned, of which nearly 3,500 were actually constituted.

Public Works.

The Public Works Department consists of P. W. and Railway Departments and is under the charge of Secretary to Government in the Department of Agriculture and Industries.

The P. W. D. deals with questions regarding the construction of public buildings and roads.

The Railway Department deals with questions regarding acquisition of lands required by the several Railways, the alignment of new lines of Railways, and with Tramway projects.

There is a Chief Engineer who is the principal professional adviser of Government.

Irrigation.

The Irrigation Department deals with irrigation, navigation, flood protection by means of embankments and drainage, the latter including relief from congestion of drainage by regulating the available supplies of water to suit the requirements of agriculture combined with the supply of water for irrigation in cases in which a supply is available.

Marine.

The Marine Department deals with all questions connected with the Bengal Pilot Service, merchant shipping, the administration of the ports, of Calcutta and inland navigation.

Police.

The Bengal Police force comprises the Military Police, the District Police, the Railway Police, and the River Police. The Bengal Police are under the control of the Inspector-General of Police, the present Inspector-General being a member of the Imperial Police Service. Under him are Deputy Inspectors-General, for the Dacca Range, the Rajshahi range, the Presidency range, the Burdwan range and the Bakarganj range and also one Deputy Inspector-General in charge of the C. I. D. and the Intelligence Branch. Each district is in charge of a Superintendent, and some of the more important districts have an Additional Superintendent. The Railway Police is divided into three distinct charges each under a Superintendent. The River Police is also under a Superintendent. The cadre comprises Assistant Superintendents, Deputy Superintendents, Inspectors, Sub-Inspectors, Sergeants, Assistant Sub-Inspectors, head constables and constables. There is also a Village Police, composed of daffadars and chowkidars, who receive a monthly salary which is collected from the villages or unions by the Panchayat or Union Board. There is a training college and school at Sardah, in the district of Rajshahi where newly appointed gazetted officers, and constables of the Bengal police learn their duties. The Calcutta City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government. The Commissioner has under him Deputy Commissioners, Assistant Commissioners, Inspectors, Sub-Inspectors, Sergeants, Assistant Sub-Inspectors, head constables and constables. A school for the training of recruits for the Calcutta Police force has been established at Calcutta. The annual cost of the Police is over 190 lakhs.

Medical.

The head of the Medical Department is the Surgeon-General with the Government of Bengal, and Sanitation is in charge of the Director of Public Health, the former appointment is always held by a member of the Indian Medical Service, while the latter post is not so reserved. There is also a Chief Engineer, Public Health Department, Bengal. In the districts the Civil Surgeons are responsible for medical work. There are 40 hospitals and dispensaries in Calcutta, 10 of which are supported by the Government and 6,38,233 persons were treated at these institutions of whom 51,253 were inpatients. In the mofussil districts there are 1,088 hospitals and dispensaries; the number of patients treated in them as well as in several huts, fairs, melas, subsidised and temporary dispensaries and in various medical centres was 80,47, 802. This includes 76,378 in-patients.

Education.

In the Presidency of Bengal education is imparted partly through Government agency and partly through private bodies, assisted to some extent by Government grants-in-aid. Government maintains four Arts Colleges in Calcutta (of which one is a college for women, one is for Mahomedans and one the Sanskrit College), one at Hughli, one at Krishnagart, three, including the Islamia Inter Colleges, at Dacca, one at Rajshahi and one at Chittagong. It also maintains two training colleges, one at Calcutta and one at Dacca, for teachers who teach in secondary schools through the medium of English, and 5 normal schools, one in each division, for the training of teachers in secondary schools through the medium of the vernacular; also an engineering college at Sibpur and an engineering school at Dacca, two medical colleges, a veterinary college, a school of art and a commercial school in Calcutta, and a weaving school at Serampore. It also provides at the headquarters of all districts, except Burdwan and Midnapore, and also at certain other mofussil centres, English high schools for the education of boys, while to some Government Arts Colleges high schools are attached. In Calcutta there are

four Government high schools for boys, two of which are attached to the Presidency College and one to the Sanskrit College. Government high schools for girls exist only in the headquarters stations of Calcutta, Dacca, Mymensingh, and Chittagong. The other secondary schools, with the exception of a few middle schools managed either by Government or by municipal and district boards, are under private control. The administration of primary education in all areas, which are not under municipalities, rests with the district boards, grants being given from provincial revenues to the boards, which contribute only slightly from their own funds. Only in backward localities are such schools either entirely managed, or directly aided, by Government. Apart from the institutions referred to above, 85 institutions called Guru Training Schools are maintained by the Department for the training of primary school teachers. For the education of Mahomedans, there are senior madrasas at Calcutta, Dacca, Chittagong and Hughli, and one junior madrasa at Rajshahi which are managed by Government. There are also certain Government institutions for technical and industrial education. All institutions for technical and industrial education (except B. E. College, the Ahsanullah School of Engineering, Dacca, the Government Commercial Institute and the Government School of Art, Calcutta) are now under the control of the Director of Industries. A large proportion of educational work of every grade is under the control of various missionary bodies, which are assisted by Government grants-in-aid.

The municipalities are required to expend a certain proportion of their ordinary income on education. They are mainly responsible for primary education within their jurisdiction, but schools in these areas are eligible also for grants from Government. These bodies maintain a high school at Burdwan, a high school at Santipur and a high school at Chittagong.

In 1926-27 there were in the Presidency :—

RECOGNISED INSTITUTIONS FOR MALES.

	Institutions.	Scholars.
Universities	2	1,714
Arts Colleges	41	22,131
Professional Colleges ..	14	6,281
High Schools	1,003	238,461
Middle Schools	1,690	147,486
Primary Schools ..	38,197	1,339,535
Special Schools	3,106	112,720

RECOGNISED INSTITUTIONS FOR FEMALES.

Arts Colleges	4	289
Professional Colleges ..	3	41
High Schools	42	9,421
Middle Schools	70	8,072
Primary Schools ..	14,612	341,969
Special Schools	49	1,756

UNRECOGNISED SCHOOLS.

Males	1,318	46,035
Females	292	7,469

The Department is administered by a Director of Public Instruction, assisted by an Assistant Director, an Addl. Asstt. Director appointed temporarily, and an Assistant Director for Muhammadan Education. Each division is in charge of a Divisional Inspector assisted by a certain number of Additional or Second Inspectors and Assistant Inspectors for Mahommedan Education according to the requirements of the several divisions. Similarly the administrative charge of the primary education of each district is in the hands of a District Inspector assisted by Sub-Divisional Inspectors and Sub-Inspectors of Schools, the latter class of officers being in some instances helped by officers of humbler status called Assistant Sub-Inspectors and Inspecting Pandits and Maulvis. Higher education is controlled by the Universities of Calcutta and Dacca established in 1857 and 1921, respectively, administered by the Chancellor (the Governor of Bengal), the Vice-Chancellor (appointed by Government) and a number of ex-officio, elected and nominated fellows. The University of Calcutta maintains a Law College, called the University Law College, Calcutta. Dacca University also has a Law Department attached to it. Calcutta University is mainly an examining body, but it has now made itself responsible for advanced teaching for which purpose it employs an agency which is mainly distinct from the staffs of the affiliated colleges.

The percentage of scholars to the total population :—

	Recognised Schools.	All Schools.
Males	7·75	7·94
Females	1·84	1·88
Total ..	4·90	5·02

The University at Dacca is of the residential type. There is a Board for Secondary and Intermediate Education at Dacca. It conducts the Matriculation and Intermediate Examinations for the students of institutions at Dacca and also the Islamic Matriculation and Intermediate Examinations.

The education of Europeans is mainly conducted by private agency, assisted by Government grants. Government however maintain a special Inspector, and also a school for boys, a school for girls (both residential) at Kurseong, and attached to the latter a Training College (for women only).

HE FINANCES OF BENGAL.

ESTIMATED REVENUE FOR 1928-29.

Heads of Revenue.	Thousands of Rs.
Land Revenue	3,22,000
Excise	2,29,000
Stamps	3,56,000
Forest	35,000
Registration ..	40,50
Scheduled Taxes ..	1800
Subsidised Companies ..	1015

THE FINANCES OF BENGAL—*contd.*

ESTIMATED REVENUE FOR 1928-29—*contd.*

	Thousands of Rs.
Irrigation, Navigation, Embankment and Drainage Works for which Capital Accounts are kept (Net)	5,07
Irrigation, Navigation, etc., for which no Capital Accounts are kept	2,22
Interest	3,48
Administration of Justice	16,21
Jails and Convict Settlements	1909
Police	9,44
Ports and Pilotage	38
Education	13,70
Medical	9,30
Public Health	1,29
Agriculture	5,28
Industries	5,97
Miscellaneous Departments	26
Civil Works	4.30
Transfer from Famine Insurance Funds	89
Receipts in aid of Superannuation	1,24
Stationery and Printing	1,64
Miscellaneous	10,00
Miscellaneous Adjustments between the Central and Provincial Governments	..
Extraordinary receipts	84
Loans and Advances by the Bengal Government	10,88
Advances from Provincial Loan Funds	39,00
Famine Insurance Fund	145
Total Receipts	10,94,11
Opening balance	1,88,27
Grand Total	12,82,38

ESTIMATED EXPENDITURE FOR 1928-29.

	Thousands of Rs.
Land Revenue	50,67
Excise	23,57
Stamps	8,95
Forests	16,39
Forests	1,75
Registration	20,38
Scheduled Taxes	15
Interest on works for which capital accounts are kept	....
Irrigation—Other revenue expenditure financed from ordinary revenue	20,38
Irrigation—Other revenue expenditure financed from Famine Insurance grants	15,63
Construction of Irrigation, Navigation Embankment and Drainage works	2,11
Interest on ordinary debt	8,92
Reduction or avoidance of debt	....
General Administration	1,24,02
Administration of Justice	1,09,49
Jails and Convict Settlements	34,83
Police	1,93,75
Ports and Pilotage	6,74
Scientific Department	28
Education	1,4280
Medical	60,06
Public Health	38,04
Agriculture	25,81
Industries	13,33
Miscellaneous Departments	2,21
Civil Works	1,02,08
Famine Relief and Insurance	2,50
Superannuation allowances and pensions	43,84
Stationery and Printing	20,78
Miscellaneous	4,40
Total	11,19,62
Forest capital outlay not charged to revenue	....
Construction of Irrigation Navigation, Embankment and Drainage works (not charged to revenue)—	
In India	22,19
In England	....
Loans and advances by the Bengal Government	18,93
Civil Works not charged to Revenue	20,44
Total Expenditure	2,39,69
Closing balance	1,45,16
GRAND TOTAL	13,59,31

Administration.

GOVERNOR AND PRESIDENT IN COUNCIL.

His Excellency Lt.-Col. the Rt. Hon. Sir Francis Stanley Jackson, P.C., G.C.I.E.

PERSONAL STAFF.

Private Secretary, H. Graham, I.C.S.

Military Secretary, Lieut.-Colonel R. B. Butler, O.B.E., M.C.

Surgeon, Major H. Hingston, I.M.S.

Aides-de Camp, Lt. J.C.A. Baltye, Royal Artillery; L. J. O. Horne, Royal Artillery; Lt. A. D. Cytable, Scots Guards.

Hony. Aides-de-Camp, Lt. Col. A. E. Pearse, E. I. Rly. Regiment; Capt. C. A. Scott, D.S.O., R.I.M., Lt. Col. J. O. Little, Commandant Northern Bengal Mounted Rifles; Lt. Col. W. D. B. Watt, Commandant IV (Cossipore) Field Brigade and Major I. M. Law, V. D. Commandant,, Calcutta, Scottish. Sardar Bahadur S. W. Laden La (Indian Police).

Commandant, H. E. the Governor's Body Guard Major Lt. Kenworthy, (The Poona Horse).

Adjutant, H.E. the Governor's Body Guard, Captain J. H. Wilkinson, 2nd Lancers (Gardner's Horse).

MEMBERS OF COUNCIL.

The Hon. Nawab Bahadur Saiyid Nawab A. Chaudhuri, Khan Bahadur, C.I.E.

„ „ Mr. A. N. Moberly C.I.E., I.C.S.

„ „ Mr. A. Marr, C.I.E.

„ „ Sir Provash Chunder Mitter, Kt. C.I.E.

„ „ Mr. W. D. R. Prentice, C.I.E., I.C.S.

BENGAL LEGISLATIVE COUNCIL.

The Hon. Raja Manmatha Nath Ray Chaudhuri (President).

„ „ Khan Bahadur Maulvi Emaduddin Ahmad, B. L. (Dy. President).

MINISTERS.

The Hon. Nawab Musharruf Hussain Khan Bahadur.

The Hon. Raja Bhupendra Narayan Sinha Bahadur of Nashipur.

SECRETARIAT.

Chief Secretary to Government, W. R. D. Prentice I.C.S.

Secretary, Revenue Department, F. A. Sachse, I.C.S.

Secretary, Finance, Commerce and Marine Departments, A. Cassells, I.C.S.

Secretary to the Council and Secretary, Legislative Department, J. Bartley, I.C.S.

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction, Edward Farley Oaten, M.A., LL.B.

Inspector-General of Police, T. C. Simpson

Commissioner, Calcutta Police, C. A. Tegart. C.I.E.

Conservator of Forests, E. O. Shebbeare.

Surgeon-General, Major-General Godfrey Tate, I.M.S.

Collector of Customs, Calcutta, G. S. Hardy, B.A., I.C.S.

Commissioner of Excise and Salt, G. P. Hogg, M.A., I.C.S.

Accountant-General, (*Offig.*) Jagat Prasad, M.A., B.SC.

Inspector-General of Prisons, Lt.-Col. W. G. Hamilton, I.M.S.

Postmaster-General, B. C. Wrenick.

Inspector-General of Registration, Rai Bahadur J. N. Ray.

Director of Agriculture, R. S. Finlow, B.Sc., F.I.C.

Proctor of Emigrants, Lt.-Col. Arthur Denham White, I.M.S., M.D.

Curator of Herbarium Royal Botanic Gardens Kalipada Biswas.

LIEUTENANT-GOVERNORS OF BENGAL.

Frederick J. Halliday	1854
John P. Grant	1859
Cecil Beadon	1862
William Grey	1867
George Campbell	1871
Sir Richard Temple, Bart., K.C.S.I ..	1874
The Hon. Ashley Eden, C.S.I.	1877
Sir Steuart C. Bayley, K.C.S.I. (*Offig.*) ..	1879
A. Rivers Thompson, C.S.I., C.I.E. ..	1882
H. A. Cockerell, C.S.I. (*Officiating*) ..	1885
Sir Steuart C. Bayley, K.C.S.I., C.I.E. ..	1887
Sir Charles Alfred Elliott, K.C.S.I. ..	1890
Sir A. P. MacDonnell, K.C.S.I. (*Offig.*) ..	1893
Sir Alexander Mackenzie, K.C.S.I. Retired 6th April 1898. ..	1895
Charles Cecil Stevens, C.S.I. (*Officiating*) .	1897
Sir John Woodburn, K.C.S.I. .. .. Died, 21st Nov. 1902.	1898
J. A. Bourdillon, C.S.I. (*Officiating*) ..	1902
Sir A. H. Leith Fraser, K.C.S.I.	1903
Lancelot Hare, C.S.I., C.I.E. (*Offig.*) ..	1906
F. A. Slacke (*Officiating*)	1906
Sir E. N. Baker, K.C.S.I. .. .. .. Retired 21st Sept. 1911.	1908
F. W. Duke, C.S.I. (*Officiating*)	1911

The office of Lieutenant-Governor of Bengal was abolished on April 1st, 1912, when Bengal was raised to a Governorship.

GOVERNORS OF THE PRESIDENCY OF FORT WILLIAM IN BENGAL.

The Rt. Hon. Baron Carmichael of Skirling, G.C.I.E., K.C.M.G.	1912
The Rt. Hon. Earl of Ronaldshay, G.C.I.E.	1917
The Rt. Hon. Lord Lytton	1922
The Rt. Hon. Sir Stanley Jackson, P.C., G.C.I.E.	1927

BENGAL LEGISLATIVE COUNCIL.

The Hon'ble Raja Manmotha Nath Roy Chaudhury of Santosh, *President.*
Khan Bahadur Moulvi Emaduddin Ahmed, B.L., *Deputy President.*

Ex-officio—

The Hon'ble Maharaja Kshaunish Chandra Ray Bahadur, of Nadia.
,, ,, Nawab Bahadur Saiyid Nawab Ali Chaudhuri, Khan Bahadur, C.I.E., of Dhanbari.
,, ,, Mr. A. N. Moberly, C.I.E., I.C.S.
,, ,, Sir Provash Chunder Miller, Kt., C.I.E.
,, ,, Mr. W. D. R. Prentice, C.I.E., I.C.S.

Official Nominated Members—

Mr. F. A. Sachse.
,, M. C. Ghose.
,, W. S. Nelson.
,, A. J. Dash.
,, R. N. Reid.
,, A. Cassells.
,, H. E. Stapleton.
,, G. P. Hogg.
,, J. R. Blair.
,, R. N. Eilchrist.
,, Khan Bahadur Md. Abdul Munim.
,, Mr. B. E. J. Burge.
,, Dr. W. A. Jenkins.

Nominated Non-Officials—

Mr. S. C. Mukerji.
Rai Sahib Rebati Mohan Sarkar.
Mr. K. C. Ray Chaudhuri.
Maulvi Latafat Hossain.
Dr. Sir Deba Prasad Sarbadhikari, KT., C.I.E., C.B.E.
Mr. D. J. Cohen.
,, P. N. Guha.
,, Bijoy Prasad Singh Roy.
,, A. F. Rahman.
Khan Bahadur Maulvi Hafizur Rahman Chaudhari.

Elected Members.

Name of Members.	Name of Constituency.
Babu Subhas Chandra Bose	Calcutta North (Non-Muhammadan.)
Dr. Pramathanath Banerjea	Calcutta East (Non-Muhammadan.)
Babu Prabhu Doyal Himatsingha	Calcutta West (Non-Muhammadan.)
Dr. J. M. Das Gupta	Calcutta Central (Non-Muhammadan.)
Mr. A. C. Banerjee	Calcutta South Central (Non-Muhammadan.)
Babu Bejoy Krishna Bose	Calcutta South (Non-Muhammadan.)
Babu Amulya Chandra Datta	Hooghly Municipal (Non-Muhammadan.)
Babu Khagendra Nath Ganguly..	Howrah Municipal (Non-Muhammadan.)
Dr. Bidhan Chandra Roy	24-Parganas Municipal North (Non-Muhammadan.)

Name of Members.	Name of Constituency.
Babu Surendra Nath Ray..	24-Parganas Municipal South (Non-Muhammadan.)
Mr. Jogesh Chandra Gupta	Dacca City (Non-Muhammadan.)
Mr. P. C. Basu	Burdwan South (Non-Muhammadan.)
Mr. Sarat C. Basu	Burdwan North (Non-Muhammadan.)
Babu Jitendra Lal Banerjee	Birbhum (Non-Muhammadan).
Srijat Bijoy Kumar Chatterjee	Bankura West (Non-Muhammadan.)
Srijat Radha Gobinda Ray	Bankura East (Non-Muhammadan.)
Babu Debendra Lal Khan	Midnapore North (Non-Muhammadan.)
Babu Promotha Nath Banerjee	Midnapore South (Non-Muhammadan.)
Babu Mahendra Nath Maity	Midnapore South-East (Non-Muhammadan.)
Sujat Taraknath Mukerjea	Hooghly Rural (Non-Muhammadan.)
Babu Ranmatha Nath Roy	Howrah Rural (Non-Muhammadan.)
Babu Hem Chandra Nasker	24-Parganas Rural Central (Non-Muhammadan.)
Babu Sasi Sekhar Basu	24-Parganas Rural South (Non-Muhammadan.)
Rai Harendranath Chaudhuri	24-Parganas Rural North (Non-Muhammadan.)
Mr. Ranjit Pal Chaudhurf	Nadia (Non-Muhammadan.)
Maharaj Kumar Sris Chandra Nandy	Murshidabad (Non-Muhammadan).
Mr. D. N. Roy, Bar-at-Law	Jessore South (Non-Muhammadan.)
Rai Jadunath Mazumdar Bahadur, C.I.E. .	Jessore North (Non-Muhammadan.)
Babu Nagendra Nath Sen..	Khulna (Non-Muhammadan.)
Mr. Kiran Saukar Roy	Dacca Rural (Non-Muhammadan.)
Babu Amarendra Nath Ghose	Mymensingh West (Non-Muhammadan.)
Babu Naliniranjan Sarker..	Mymensingh East (Non-Muhammadan.)
Dr. Kumud Sankar Ray	Faridpur North (Non-Muhammadan.)
Babu Surendra Nath Biswas	Faridpur South (Non-Muhammadan.)
Babu Saral Kumar Datta	Bakarganj North (Non-Muhammadan.)
Rai Satyendra Nath Roy Choudhuri Bahadur ..	Bakarganj South (Non-Muhammadan.)
Mr. J. M. Sen Gupta	Chittagong (Non-Muhammadan.)
Babu Akhil Chandra Datta	Tippera (Non-Muhammadan.)
Babu Satyendra Chandra Ghose Maulik ..	Naokhali (Non-Muhammadan.)
Babu Sachindra Narayan Sanyal	Rajshahi (Non-Muhammadan.)
Babu Jogindra Chandra Chakravarti	Dinajpur (Non-Muhammadan.)
Babu Nagendra Narayan Ray	Rangpur West (Non-Muhammadan.)
Babu Jotindra Nath Chakraburtty	Rangpur East (Non-Muhammadan.)
Srijat Jogindra Nath Moitra	Bogra *cum* Pabna (Non-Muhammadan.)

The United Provinces.

The United Provinces of Agra and Oudh lie in practically the centre of Upper India. They are bounded on the north by Tibet, on the north-east by Nepal, on the east and south-east by Bihar, on the south by two of the Chota Nagpur States of the Central India Agency and the Saugor district of the Central Provinces, and on the west by the States of Gwalior, Dholpur, Bharatpur, Sirmoor, and Jubbal, and by the Punjab. Their total area amounts to 106,295 square miles, to which may be added the area of the two Indian States of Tehri and Rampur, both of which lie within the United Provinces, 5,392 square miles and the newly-created State of Benares with an area of 875 square miles, giving a total of 112,562 square miles. The total population is 46,510,668.

The Provinces, originally termed the North-Western Provinces and so amalgamated in 1877, receiving their present designation in 1902, include four distinct tracts of country: portions of the Himalayas, including the Kumaon division which consists of three hill districts, two of which are entirely in the hills and one is half in the submontane belt, the sub-Himalayan tract; the great Gangetic plain, and portions of the hill systems of Central India including Bundelkhand. The Gangetic plain is protected by an extensive Canal system, which though somewhat liable to run short of water in extremely dry years, is of great benefit in all ordinary years and years of limited drought. The first two of these tracts are infertile and support a very sparse population and the Central Indian plateau is almost equally infertile, though better populated. The soil of the Gangetic plain, however, possesses an extreme fertility and here the density of population rises from 512 persons per square mile in the west, to 549 in the centre and 718 in the east, which gives the Provinces as a whole a greater population pressure on the soil than any other Provinces in India. In the south there are low rocky hills, broken spurs of the Vindhyan mountains, covered with stunted trees and jungle, and in the North the lower slopes of the Himalayas, clothed with dense forest, affording excellent big and small game shooting, and rising beyond in a tangled mass of ridges, ever higher and higher, until is reached the line of the eternal snows, but the greater part of the provinces consists of level plain, teeming with highly-cultivated fields and watered by three rivers—the Ganges, Jumna, and Gogra.

The People.

The population is mainly Hindu, 85 per cent. ranking as such whilst Mahomedans number 14 per cent., the total of all other religions being a little over 1 per cent. composed of Christians (Europeans and Indians) Jains, Aryas and Sikhs. The Aryas are the followers of the Arya Samaj sect, which obtains widely in the Punjab and has extended its influence to the United Provinces. The three main physical types are Dravidian, Aryan and Mongoloid, the latter being confined to the Himalayan and sub-Himalayan districts and the former to South Mirzapur and Bundelkhand, whilst the high-caste Aryans frequent the Western districts of the Provinces. Most of the people, however, show a mixed Arya-Dravidian origin. Three languages are spoken by the great majority of the people in the plains—Western Hindi, Eastern Hindi and Bihari; Urdu, or Hindustani is a dialect of Western Hindi, though it contains a large admixture of Persian and Arabic words, which makes it a *lingua franca.*

Industries.

The principal industry is agriculture, which supports no less than 75 per cent. of the population. The soils of the Provinces fall into three groups; the valley soils of the Himalayas, the main alluvium and the Central Indian alluvium; the chief characteristic soil of the Central Indian alluvium is the black soil, with a lighter variant, though here also there are light loams and gravel. The Himalayan soils are of local origin and vary with the nature of the rock from which they have been formed, whilst the main alluvium soils are sand, clay and loam, the loam being, naturally, the most productive. The soil generally yields excellent crops of rice, millet, maize, linseed, cotton, wheat, sugarcane, pulses, barley and poppy, rice being grown mostly in low-lying, heavy clays. The greater part of the Provinces is highly cultivated, the rainfall varies from 50 to 60 inches in the Hills, to 40 inches in the Benares and Gorakhpur Divisions, whilst the Agra Division receives about 25 to 30 inches annually only. Drought seriously affected Bundelkhand and the Agra Division, in the past, but improved drainage, and irrigation (a protective system of irrigation works exists and is being extended) have enabled a complete recovery to be made and the agricultural prosperity of the Provinces is now high, though it varies with the rainfall. Land is held mostly on the ryotwari tenure in Bundelkhand and Kumaon, on zemindari tenure in Agra and taluqdari tenure in Oudh. The principal land owners in Oudh are the Taluqdars, some of whom own very large estates. The area held in taluqdari tenure amounts to 54 per cent. of the total area in Oudh.

Manufactures.

The Provinces are not rich in minerals. Coal exists in Southern Mirzapur, iron and copper are found in the Himalayan districts, and there were mines of importance there formerly, but increased difficulty of working them as veins became exhausted resulted in the closure of most of them. Gold is found in minute quantities by washing in some of the rivers in the Hills. Limestone is found in the Himalayas and in the Meerut district, and stone is largely quarried in the Mirzapur district. Cotton is ginned and spun throughout the provinces, as a home industry; an
weaving, by means of hand-looms, is carried
in most districts. According to the census
1921, 100,993 persons were dependent
cotton ginning, cleaning and pressing,
820,069 on spinning and weaving. The la
industry is in the Azamgarh district,
there are 8,585 looms. Silk spinning is co
almost entirely to the district of B
where the famous *kimkhab* brocade is ma
broidery is manufactured in Lucknow, w
noted *chikan* work of silk on cotton o
is produced, and in Benares, where

Name of Members.	Name of Constituency.
Maulvi Kasiruddin Ahmad	Rangpur West (Muhammadan.)
Kazi Emdadul Huq	Rangpur East (Muhammadan.)
Mr. Altaf Ali	Bogra (Muhammadan.)
Khan Sahib Maulvi Muazzam Ali Khan ..	Pabna (Muhammadan.)
Nawab Musharruf Hossain, Khan Bahadur ..	Malda *cum* Jalpaiguri (Muhammadan.)
Mr. J. Campbell Forrester	Presidency and Burdwan (European.)
,, F. E. James, O.B.E.	Do.
,, W. C. Wordsworth	Do.
,, J. G. Macartney	Dacca and Chittagong (European.)
,, W. L. Travers, C.I.E., O.B.E.	Rajshahi (European.)
,, L. T. Maguire	Anglo-Indian.
,, E. T. McCluskie	Do.
Raja Bhupendra Narayan Sinha Bahadur, of Nashipur.	Burdwan Landholders.
Rai Manmatha Nath Mitra Bahadur	Presidency Landholders.
Babu Saroda Kripa Lala	Chittagong Landholders.
Maharaja Jogindra Nath Ray of Nator	Rajshahi Landholders.
Mr. S. C. Bose	Calcutta University.
Maharaja Shoshi Kanta Acharyya	Dacca University.
Mr. P. Parrott	Bengal Chamber of Commerce.
,, G. Morgan, C.I.E.	Do.
,, J. H. Fyfe	Do.
,, O. S. Martin	Do.
,, A. D. Gordon	Do.
	Do.
,, A. McD. Eddis..	Indian Jute Mills Association.
,, E. G. Abbott	Do.
,, N. R. Luke	Indian Tea Association.
,, T. W. Dowding	Indian Mining Association.
,, H. D. Thomas	Calcutta Trades Association.
,, Byomkes Chakravarti	Bengal National Chamber of Commerce.
,, Satish Chandra Sen	Do.
Rai Badridas Goenka Bahadur	Bengal Marwari Association.
Mr. Ananda Mohan Poddar	Bengal Mahajan Sabha.

The United Provinces.

The United Provinces of Agra and Oudh lie in practically the centre of Upper India. They are bounded on the north by Tibet, on the north-east by Nepal, on the east and south-east by Bihar, on the south by two of the Chota Nagpur States of the Central India Agency and the Saugor district of the Central Provinces, and on the west by the States of Gwalior, Dholpur, Bharatpur, Sirmoor, and Jubbal, and by the Punjab. Their total area amounts to 106,295 square miles, to which may be added the area of the two Indian States of Tehri and Rampur, both of which lie within the United Provinces, 5,392 square miles and the newly-created State of Benares with an area of 875 square miles, giving a total of 112,562 square miles. The total population is 46,510,668.

The Provinces, originally termed the North-Western Provinces and so amalgamated in 1877, receiving their present designation in 1902, include four distinct tracts of country: portions of the Himalayas, including the Kumaon division which consists of three hill districts, two of which are entirely in the hills and one is half in the submontane belt, the sub-Himalayan tract; the great Gangetic plain, and portions of the hill systems of Central India including Bundelkhand. The Gangetic plain is protected by an extensive Canal system, which though somewhat liable to run short of water in extremely dry years, is of great benefit in all ordinary years and years of limited drought. The first two of these tracts are infertile and support a very sparse population and the Central Indian plateau is almost equally infertile, though better populated. The soil of the Gangetic plain, however, possesses an extreme fertility and here the density of population rises from 512 persons per square mile in the west, to 549 in the centre and 718 in the east, which gives the Provinces as a whole a greater population pressure on the soil than any other Provinces in India. In the south there are low rocky hills, broken spurs of the Vindhyan mountains, covered with stunted trees and jungle, and in the North the lower slopes of the Himalayas, clothed with dense forest, affording excellent big and small game shooting, and rising beyond in a tangled mass of ridges, ever higher and higher, until is reached the line of the eternal snows, but the greater part of the provinces consists of level plain, teeming with highly-cultivated fields and watered by three rivers—the Ganges, Jumna, and Gogra.

The People.

The population is mainly Hindu, 85 per cent. ranking as such whilst Mahomedans number 14 per cent., the total of all other religions being a little over 1 per cent. composed of Christians (Europeans and Indians) Jains, Aryas and Sikhs. The Aryas are the followers of the Arya Samaj sect, which obtains widely in the Punjab and has extended its influence to the United Provinces. The three main physical types are Dravidian, Aryan and Mongoloid, the latter being confined to the Himalayan and sub-Himalayan districts and the former to South Mirzapur and Bundelkhand, whilst the high-caste Aryans frequent the Western districts of the Provinces. Most of the people, however, show a mixed Arya-Dravidian origin. Three languages are spoken by the great majority of the people in the plains—Western Hindi, Eastern Hindi and Bihari; Urdu, or Hindustani is a dialect of Western Hindi, though it contains a large admixture of Persian and Arabic words, which makes it a *lingua franca*.

Industries.

The principal industry is agriculture, which supports no less than 75 per cent. of the population. The soils of the Provinces fall into three groups; the valley soils of the Himalayas, the main alluvium and the Central Indian alluvium; the chief characteristic soil of the Central Indian alluvium is the black soil, with a lighter variant, though here also there are light loams and gravel. The Himalayan soils are of local origin and vary with the nature of the rock from which they have been formed, whilst the main alluvium soils are sand, clay and loam, the loam being, naturally, the most productive. The soil generally yields excellent crops of rice, millet, maize, linseed, cotton, wheat, sugarcane, pulses, barley and poppy, rice being grown mostly in low-lying, heavy clays. The greater part of the Provinces is highly cultivated, the rainfall varies from 50 to 60 inches in the Hills, to 40 inches in the Benares and Gorakhpur Divisions, whilst the Agra Division receives about 25 to 30 inches annually only. Drought seriously affected Bundelkhand and the Agra Division, in the past, but improved drainage, and irrigation (a protective system of irrigation works exists and is being extended) have enabled a complete recovery to be made and the agricultural prosperity of the Provinces is now high, though it varies with the rainfall. Land is held mostly on the ryotwari tenure in Bundelkhand and Kumaon, on zemindari tenure in Agra and taluqdari tenure in Oudh. The principal land owners in Oudh are the Taluqdars, some of whom own very large estates. The area held in taluqdari tenure amounts to 54 per cent. of the total area in Oudh.

Manufactures.

The Provinces are not rich in minerals. Coal exists in Southern Mirzapur, iron and copper are found in the Himalayan districts, and there were mines of importance there formerly, but increased difficulty of working them as veins became exhausted resulted in the closure of most of them. Gold is found in minute quantities by washing in some of the rivers in the Hills. Limestone is found in the Himalayas and in the Meerut district, and stone is largely quarried in the Mirzapur district. Cotton is ginned and spun throughout the provinces, as a home industry; and weaving, by means of hand-looms, is carried on in most districts. According to the census of 1921, 100,993 persons were dependent on cotton ginning, cleaning and pressing, and 820,069 on spinning and weaving. The largest industry is in the Azamgarh district, where there are 8,585 looms. Silk spinning is confined almost entirely to the district of Benares; where the famous *kimkhab* brocade is made. Embroidery is manufactured in Lucknow, where the noted *chikan* work of silk on cotton or muslin is produced, and in Benares, where gold and

silver work on velvet, silk, crepe and sarsenet obtains. The glass industry is important in some districts. Benares and Moradabad are noted for their lacquered brass work, Farrukhabad for its calico prints and Agra for its carpets and marble and alabaster articles; porcelain is manufactured in Ghazipur, and other industries are those of paper-making (Lucknow) dyeing, leather and fireworks. The chief centre of European and Indian industry is Cawnpore, which, situated in the most advantageous position on the Ganges, possesses tanneries, cotton, woollen and other mills, which have a large and ever increasing output (the woollen mill is the largest in India). There are cotton factories at Aligarh (famous for its locks), Meerut and Bareilly; Mirzapur (which produces also excellent carpets), Hardoi and Hathras have cotton mills. Excellent furniture is made at Bareilly, at Allahabad there are stone works, at Rosa there is a large English distillery, with patent still.

The largest trade centres are Cawnpore, Allahabad, Mirzapur, Benares, Lucknow, Meerut, Aligarh, Hathras, Muttra, Agra, Farukhabad, Moradabad, Chandausi, Bareilly, Saharanpur, Muzaffarnagar, Ghaziabad, Khurja, Gorakhpur, Ghazipur, Pilibhit and Shahjahanpur

Administration.

The Province was until the close of 1920 administered by a Lieutenant-Governor, chosen from the ranks of the Indian Civil Service. Under the Reform scheme the Province was raised to the status of a Governor-in-Council, the Governor being assisted by two members of the Executive Council in charge of the Reserved Subjects and three Ministers from Jan. 12, 1926, in charge of the Transferred Subjects. The medium for the transaction of public business is the Secretariat, the Staff of which consists of 7 Secretaries and 4 Deputy Secretaries. The Director of Public Instruction is also *ex-Officio* Deputy Secretary in the Education Department. The Chief Secretary is in charge of Appointment, General Administration, Executive, Political. Newspaper and Police Departments; the Finance Secretary deals mainly with the Finance Department: the Revenue Secretary is in charge of the Revenue, and Forest Departments and Public Works Department, (Buildings and Road); the Education Secretary looks to the Education, Industries, Agriculture and Excise Departments; the L. S. G. Secretary to the local Self-Government, Municipal, Medical and Public Health Departments and the Judicial Secretary is in charge of the Judicial and Legislative Departments. The seventh Secretary belongs to the Public Works Department, (Irrigation Branch) and is also Chief Engineers for the Irrigation Branch of the P.W.D. Government spends the cold weather, October to April, in Lucknow and Allahabad, mostly in Lucknow, though the Secretariat remains throughout the year at Allahabad. The Governor and the Secretaries spend the hot weather in Naini Tal, but during the monsoon the Governor tours the plains, as he does also in the cold weather. The Board of Revenue is the highest court of appeal in revenue and rent cases, and it has important executive duties, being the chief revenue authority in the province. There are forty-eight British districts, thirty-six in Agra and twelve in Oudh, average area 2,000 square miles and average population a million. Each district is in charge of a District Officer, termed a Collector and Magistrate in Agra and a Deputy Commissioner in Oudh and Kumaon. The districts are grouped together in divisions under a Commissioner. There are ten divisions, having an average area of nearly 12,000 square miles and a population of from 5 to 6 millions. The districts are sub-divided into *tahsils*, with an average area of 500 square miles and a population of 220,000. Each *Tahsil* is in charge of a *Tahsildar*, who is responsible for the collection of revenue, and also exercises judicial powers. *Tahsils* are divided into *parganas* which are units of importance in the settlement of land revenue. Subordinate to the *Tahsildars* are *naib tahsildars* and *kanungos*. Ordinarily there are three *kanungos* and one *naib tahsildar* to a *tahsil*. The *Kanungos* supervise the work of the *patwaris*, or village accountants, check their papers and form a link direct between the villagers and Government. For judicial purposes (revenue and criminal), the District Officer assigns a sub-division, consisting of one or more *tahsils*, as the case may be to each of his subordinates, who may be covenanted civilians (Joint and Assistant Magistrates and Collectors) or members of the Provincial Service (Deputy Collectors and Magistrates). The Commissioner of the Rohilkhand and Kumaon Divisions are Political Agents for the Native States of Rampur and Tehri respectively and the Commissioner of Benares is the Political Agent for Benares State.

Justice.

Justice is administered by the High Court of Judicature at Allahabad in the province of Agra and by the Chief Court in Oudh sitting at Lucknow which are the final appellate authorities in both criminal and civil cases. The former consists of a Chief Justice and eight permanent and two temporary puisne judges, five of whom are Indians, and the latter consists of a Chief Judge and four judges three of whom are Indians. There are thirty-one posts (twenty-four in Agra and seven in Oudh) of district and sessions judges of which eight are held by Indians not belonging to the Indian Civil Service as they have been listed to the provincial service and the bar. They have both original and appellate jurisdiction in civil and criminal cases and occasional appellate jurisdiction in rent cases. District Officers and their assistants including tahsildars, preside in criminal courts as magistrates and as collectors and assistant collectors, in rent and revenue courts and dispose of a good deal of the work. Kumaun has been brought under the Civil jurisdiction of the High Court from 1-4-26. The deputy and assistant commissioners exercise inferior civil powers in this division which has no separate civil courts. In the rest of the provinces there are subordinate judges, judges of small cause courts and munsifs who dispose of a large number of civil suits. In Agra the jurisdiction of a subordinate judge extends to all original suits without pecuniary limit and a munsif can hear cases ordinarily of a value not exceeding Rs. 2,000, and if specially empowered up to Rs. 5,000; In Oudh the ordinary jurisdic-

silver work on velvet, silk, crepe and sarsenet obtains. The glass industry is important in some districts. Benares and Moradabad are noted for their lacquered brass work, Farrukhabad for its calico prints and Agra for its carpets and marble and alabaster articles ; porcelain is manufactured in Ghazipur, and other industries are those of paper-making (Lucknow) dyeing, leather and fireworks. The chief centre of European and Indian industry is Cawnpore, which, situated in the most advantageous position on the Ganges, possesses tanneries, cotton, woollen and other mills, which have a large and ever increasing output (the woollen mill is the largest in India). There are cotton factories at Aligarh (famous for its locks), Meerut and Bareilly; Mirzapur (which produces also excellent carpets), Hardoi and Hathras have cotton mills. Excellent furniture is made at Bareilly, at Allahabad there are stone works, at Rosa there is a large English distillery, with patent still.

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tion of a subordinate judge extends to suits valu-
ing not more than Rs. 20,000 and the ordinary
jurisdiction of a munsif to suits of Rs. 2,000
value, provided that in special cases the limit
of pecuniary jurisdiction can be removed alto-
gether in the case of a subordinate judge and
that of the munsif raised up to Rs. 5,000.
Appeals from munsif always lie to the district
judge while those from the subordinate judges
go to the High Court or the Chief Court except
in cases of a value of Rs. 5,000 or less which are
heard by the district judge. Small cause court
judges try suits to the value of Rs. 500. There
are also honorary munsifs limited to Rs. 200
suits, and village munsifs whose jurisdiction is
fixed at Rs. 20.

Local Self-Government.

The units of local self-government are the
district and municipal boards which, with the
exception of six municipal boards, have non-
official Chairman. The largest municipal boards
have executive officers to whom certain admini-
strative powers are reserved. The administrative
functions of the majority of the municipal boards
and of all district boards are performed by the
chairman and the secretary, but the boards
themselves are directly responsible for most of
the administration. The district boards obtain
45% of their income from Government grants.
The other chief source of income is the local
rate levied from the landowers. The chief source
of municipal income is the octroi or terminal tax
and toll which is an octroi in modified form. Local
opinion is strongly in favour of indirect as opposed
to direct taxation for municipal purposes

Public Works.

The Public Works Department is divided
into the Buildings and Roads branch and the
Irrigation branch. The Buildings and Roads
branch is administered by a Civilian Secretary
who has a Chief Engineer under him and the
Irrigation branch by two Chief Engineers who are
also Secretaries to Government. The Province
is divided into circles and divisions both for
buildings and roads and for irrigation purposes.
Each circle is in charge of a Superintending Engi-
neer, or a Deputy Chief Engineer and each
division is in charge of an Executive Engineer.
The whole of the irrigation works constructed
or maintained by Government are in charge of
the Irrigation branch. All metal roads main-
tained from Provincial funds and construction
of all buildings costing more than Rs. 20,000 are
in charge of the Buildings and Roads branch.
In the Irrigation branch there is a separate
Chief Engineer with a full staff for the construc-
tion of the Sarda Canal, a work of the first
magnitude which when completed will introduce
irrigation into most of the districts of Oudh.

Police

The Police Force is divided into District
and Railway Police and is administered
by an Inspector-General, with four Deputies and
two Assistants, forty-six District Superinten-
dents, three Railway Superintendents, fifty-
one Assistant Superintendents and fifty
Deputy Superintendents. There is a Police
Training School at Moradabad. There is a
local C. I. D forming a separate detective de-
partment, under a Deputy Inspector-General,
with three assistants. The armed police are
armed with the ·476 musket and in certain dis-
tricts to some extent also with the Martini-
Henry rifle. The administration of the Jail
Department is in charge of an Inspector-General
of Prisons, who is a member of the Indian
Medical Service

Education.

Education is maintained in part by the State
and partly by means of grants-in-aid. There
are five universities, the four residential univer-
sities of Allahabad, Lucknow, Aligarh (Muslim)
and Benares (Hindu) and the affiliating Univer-
sity of Agra. The last named was established
in 1927 and consists of the eight colleges, for-
merly associated with Allahabad University on
its external side, *viz.*, the Agra and St. John's
Colleges at Agra, the Christ Church, D.A.V., and
Sanatan Dharam Colleges at Cawnpore, the Meerut
College, Meerut, the Bareilly College, Bareilly and
St. Andrew's College, Gorakhpur. There are a
number of Intermediate Colleges which prepare
boys for the high school and intermediate
examinations conducted by the Board of High
School and Intermediate Education, which
controls high school and intermediate edu-
cation. The Isabella Thoburn College at
Lucknow and the Crosthwaite Girls' College
at Allahabad impart university education to
Indian girls and the Theosophical National
Girls' School and Women's College at Benares
teach up to the intermediate stage. The St.
George's Intermediate College, Mussoorie, the
Philander-Smith College, Naini Tal, the St.
Joseph's College, Naini Tal, the Martiniere College,
Lucknow and the Boys' Intermediate College,
Allahabad, are a few of the well known institu-
tions for European and Anglo-Indian children
in the province; besides these, there are many
excellent private educational institutions for
European boys and girls both in the hills and
plains which are attended by students from all
over India. Government maintain Training
Colleges for teachers in Lucknow, Allahabad
and Agra, and there are training departments
attached to the Aligarh Muslim University and
the Benares Hindu University. There is a Go-
vernment Engineering College at Roorkee (Thoma-
son College), a School of Art and Crafts in Luck-
now and an Agricultural College, and a Techno-
logical Institute at Cawnpore; there is also a non-
Government Agricultural Institute at Naini,
Allahabad. Education in law is given at the
four residential universities and at the Agra
and Meerut colleges. Instruction in commerce
for the B. Com. degree of the Agra University
is given in the Sanatan Dharam College, Cawn-
pore. The King George's Medical College,
Lucknow, now merged in the Lucknow Univer-
sity, prepares candidates for the M.B.B.S. degree
of the Lucknow University. Besides this there
are two medical schools at Agra for males and
females. Public schools for secondary and
primary vernacular education are almost entirely
maintained or aided by district and municipal
boards and vernacular education is almost
entirely in their hands.

Medical.

The Medical Department is in charge of
an Inspector-General of Civil Hospitals.
A Civil Surgeon is in charge and is
responsible for the medical work of each dis-
trict, and in a few of the larger stations he has
an assistant. In two stations (Ranikhet and
Roorkee) Medical Officers in military employ

hold collateral civil charge. There are eighty-three Provincial Medical service officers in charge of important dispensaries and a large number of Indian Provincial subordinate medical service officers. Lady doctors and women sub-assistant surgeons visit *purdanashin* women in their own homes and much good work is done in this manner. Maternity and Child Welfare Centres have been opened in almost all the districts of the province.

The best equipped hospitals for Indian patients are the Thomason Hospital at Agra, King George's Hospital which has a Pathological Laboratory attached to it and the Balrampur Hospital at Lucknow. King Edward VII Hospital, Benares, the Civil Hospital at Allahabad (for Europeans, Anglo-Indians and Indians living in European style) and Saint Mary's Cottage Hospital, Mussoorie. The Ramsay Hospital for Europeans at Naini Tal is a first class institution and there are also the Lady Dufferin Hospitals. King George's Medical College, Lucknow, is one of the best equipped Colleges in the country, with a staff of highly efficient professors, and the hospital attached to it is the first in the Province. There are also male and female medical schools at Agra. There is an X-Ray Institute at Dehra Dun, where valuable research work has been carried out, and there are sanatoria for British soldiers in the hills. The King Edward VII Sanatorium at Bhowali in the district of Naini Tal is an up-to-date and well equipped institution for the treatment of European and Indian consumptives. In addition five centres for the treatment of tubercular patients have been established at Agra, Allahabad, Benares, Cawnpore and Lucknow. There are mental Hospitals for Indian non-criminal lunatics at Agra and Bareilly and for criminal lunatics at Benares.

THE FINANCES OF THE UNITED PROVINCES.

As explained in the chapters on the new constitution of India, under the Reform Act of 1919, the financial position of the Provinces underwent a remarkable change. The Provinces are, for all practical purposes, financially independent of the Government of India. The contribution payable by the Local Government has been remitted entirely by the Government of India with effect from the year 1928-29. As the finances of the Provinces thus become of greater importance, the position is set out in some detail in the following pages:—

ESTIMATED REVENUE FOR 1928-29.

	Rs.
Principal Heads of Revenue.	
Taxes on Income	....
Land Revenue	6,86,61,637
Excise	1,35,77,200
Stamps	1,73,80,000
Forests	57,78,015
Registration	13,50,000
Scheduled Taxes	....
Total	10,67,46,852
Railways.	
Subsidised Companies	1,75,000
Irrigation.	
Works for which capital accounts are kept—	
(1) Productive Works— Net receipts	1,01,13,544
(2) Un-productive Works— Net receipts	—3,60,505
Total, net receipts	97,52,939
Works for which no capital accounts are kept	21,000
Total Irrigation	97,73,939
Debt Services.	
Interest	9,90,000
Total	9,90,000
Civil Administration.	
Administration of Justice	15,01,200
Jails and Convict Settlements	8,07,400
Police	2,58,800
Education	10,73,500
Medical	2,91,500
Public Health	2,45,688
Agriculture	5,76,062
Industries	49,870
Miscellaneous Departments	67,280
Total	48,71,300
Buildings, Roads and Miscellaneous Public Improvements— Civil Works	4,03,407
	4,03,407

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Police	2,58,800
Education	10,73,500
Medical	2,91,500
Public Health	2,45,688
Agriculture	5,76,062
Industries	49,870
Miscellaneous Departments	67,280
Total	48,71,300
Buildings, Roads and Miscellaneous Public Improvements— Civil Works	4,03.407
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Miscellaneous.	Rs.
Transfers from Famine Insurance Fund	....
Receipts in aid of superannuation	2,72,500
Stationery and Printing	3,81,000
Miscellaneous	11,07,100
Total	17,60,600
Extraordinary receipts	10,000
Miscellaneous adjustments between the Central and Provincial Governments	....
Total Revenue	12,47,31,098
Debt, deposits and advances :—	
(a) Loans between the Central and Provincial Governments	2,25,25,000
(b) Loans and advances by Provincial Governments	12,59,000
(c) Famine Insurance Funds	26,65,800
(d) Deposits of Sinking Funds for Provincial Loans	26,65,000
(e) General Police Fund	....
(f) Government Press Depreciation Fund	....
Total	2,91,14,800
Total receipts	15,38,45,898
Opening Balance	26,93,305
Grand Total	15,65,39,203

ESTIMATED EXPENDITURE FOR 1928-29.

Direct demands on the Revenues.	
Taxes on Income	*Nil.*
Land Revenue	92,69,565
Excise	13,73,635
Stamps	3,68,790
Forests	30,57,752
Forest Capital outlay charged to revenue	1,98,770
Registration	4,94,508
Total	1,47,63,020
Railway Revenue Account	
Sate Railways—Interest on debt	11,650
Subsidised companies	5,200
Miscellaneous railway expenditure	....
Total	16,850
Irrigation Revenue Account.	
Works for which capital accounts are kept—	
Interest on debt	88,71,644
Miscellaneous irrigation expenditure	—2,35,350
Do. financed from Famine Insurance grant	23,800
Total	86,60,094
Irrigation Capital Account (charged to revenue).	
Construction of Irrigation Works—	
A.—Financed from Famine Insurance Grants	5,80,900
B.—Financed from ordinary revenues	1,73,200
Total	7,54,100
Debt Services.	
Interest on ordinary debt	35,04,502
Sinking Fund	24,00,000
Other appropriations	....
Total	59,04,502

	Rs.
Civil Administration.	
General Administration	1,33,66,096
Administration of Justice	73,79,832
Jails and Convicts' Settlements	37,94,080
Police	1,68,39,489
Scientific Departments	23,401
Education	1,96 95,793
Medical	36,50,450
Public Health	25,30,515
Agriculture	35,11,863
Industries	13,17,390
Miscellaneous Departments	76,118
Exchange	*Nil.*
Total	7,21,85,027
Buildings, Roads and Miscellaneous Public Improvements.	
Civil Works	70,93,999
Total	70,93,999
Miscellaneous.	
Famine Relief and Insurance—	
A—Famine Relief	20,500
B—Transfers to Famine Insurance Fund	19,05,800
Superannuation Allowances and Pensions	47,53,561
Stationery and Printing	11,84,039
Miscellaneous	4,26,705
Total	82,90,605
Expenditure in England—	
Secretary of State	50,666
High Commissioner	37,11,133
Contributions and Assignments.	
Contribution to the Central Government	....
Miscellaneous adjustments between the Central and Provincial Governments.	....
Total	....
Irrigation and other capital expenditure not charged to revenue.	
(*a*) Construction of irrigation works	1,36,35,467
(*b*) Forest outlay	....
(*c*) Outlay on Agricultural improvement	26,790
(*d*) Outlay on Improvement of public health	5,00,000
Total	1,41,62,257
Debt, Deposits and Advances—	
(*a*) Loans and Advances by Provincial Governments	15,48,999
(*b*) Loans between the Central and Provincial Governments	26,79,281
(*c*) Civil Contingencies Fund	1,00,000
(*d*) Famine Insurance Fund	12,50,000
(*e*) Government Press Depreciation Fund	19
60-B. Payment of Commuted Value of Pensions	3,50,000
60 Civil Works	47,88,681
60-A. Other Provincial Works not charged to revenue	2,90,000
Sinking Fund Investment Account	26,65,000
General Police Fund	....
Total	1,36,71,980
Total Disbursements	14,92,64,232
Closing Balance	72,74,970
Grand Total	15,65,39,203

Administration.

Governor.—His Excellency Sir Malcolm Hailey, G.C.I.E., K.C.S.I., I.C.S.

Private Secretary.—Major T. S. Paterson, M.C.

Aides-de-Camp.—Captain E. C. Pepper and Capt. D. W. Neilson.

EXECUTIVE COUNCIL.

The Hon'ble Capt. Nawab Sir Muhammad Ahmad Said Khan, K.C.I.E., M.B.E.

The Hon'ble Mr. G. B. Lambert, C.S.I., I.C.S.

MINISTERS.

The Hon'ble Nawab Muhammad Yusuf, Bar-at-Law.

The Hon'ble Maharaj Kumar Major Mahijit Singh.

SECRETARIAT.

Chief Secretary to Government, Kunwar Jagdis Prasad, C.I.E., I.C.S.

Financial Secretary to Government, E. A. H. Blunt, C.I.E., O.B.E., I.C.S.

Revenue, P. W. D., H. A. Lane, I.C.S.

Judicial Secretary, R. L. Yorke, I.C.S.

Secretary to Government, Irrigation Branch B. D. O' Darley, C.I.E.

MISCELLANEOUS APPOINTMENTS

Opium Agent, Ghazipur, W. Gaskell, I.C.S.

Chief Conservator of Forests, F. F. R. Channer, O.B.E

Director of Public Instruction, A. H. Mackenzie, M.A.

Inspector-General of Police, R. J. S. Dodd.

Inspector-General of Civil Hospitals, Col. R. H. Baird, I.M.S.

Director of Public Health, Lieut.-Colonel Cuthbert Lindsay Dunn.

Inspector-General of Registration, Rai Bahadur Brij Lal.

Commissioner of Excise, J. N. L. Sathe, I.C.S.

Accountant-General, Hanumanta Bhimasena Rau, B.A.

Inspector-General of Prisons, Major J. E. Clements, M.B., D.P.H., I.M.S.

Postmaster-General, Promotho Nath Bose, M.A.

Director of Agriculture, George Clarke, F.I.C., F.C.S., H.L.S., M.L.C.

LIEUTENANT-GOVERNORS OF THE NORTH WESTERN PROVINCES.

Sir C. T. Metcalfe, Bart., G.C.B. 1836
The Right Hon. the Governor-General in the North-Western Provinces (Lord Auckland). 1838
T. C. Robertson 1840
The Right Hon. the Governor-General in the North-Western Provinces (Lord Ellenborough). 1842
Sir G. R. Clerk, K.C.B. 1843
James Thomson. Died at Bareilly. .. 1843
A. W. Begbie, *In charge* 1853
J. R. Colvin. Died at Agra 1853
E. A. Reade, *In charge* 1857
Colonel H. Fraser, C.B., Chief Commissioner, N.-W. Provinces. 1857
The Right Hon. the Governor-General administering the N.-W. Provinces (Viscount Canning). 1858
Sir G. F. Edmonstone 1859
R. Money, *In charge* 1863
The Hon. Edmund Drummond 1863
Sir William Muir, K.C.S.I. 1868
Sir John Strachey, K.C.S.I. 1874
Sir George Couper, Bart., C.B. 1876

LIEUTENANT-GOVERNORS OF THE NORTH-WESTERN PROVINCES AND CHIEF COMMISSIONERS OF OUDH.

Sir George Couper, Bart., C.B., K.C.S.I. 1877
Sir Alfred Comyns Lyall, K.C.B. 1882
Sir Auckland Colvin, K.C.M.G., C.I.E. .. 1887
Sir Chas. H. T. Crosthwaite, K.C.S.I. .. 1892
Alan Cadell (*Officiating*) 1895
Sir Antony P. MacDonnell, K.C.S.I. (*a*) .. 1895
Sir J. J. D. LaTouche, K.C.S.I. 1901

(*a*) Afterwards (by creation) Baron MacDonnell.

LIEUTENANT-GOVERNORS OF THE UNITED PROVINCES OF AGRA AND OUDH.

Sir J. J. D. LaTouche, K.C.S.I. 1902
Sir J. P. Hewett, K.C.S.I., C.I.E. 1907
L. A. S. Porter, C.S.I. (*Officiating*) 1912
Sir J. S. Meston, K.C.S.I. 1912
Sir Harcourt Butler, K.C.S.I., C.I.E. .. 1918

GOVERNORS OF THE UNITED PROVINCES.

Sir Harcourt Butler, K.C.S.I., C.I.E. .. 1920
Sir William Marris, K.C.I.E. 1921
Sir Alexander Muddiman, K.C.S.I., C.I.E. 1927
Sir Malcolm Hailey, G.C.I.E., K.C.S.I., I.C.S. 1928

UNITED PROVINCES LEGISLATIVE COUNCIL.

PRESIDENT:

The Hon'ble Rai Bahadur Lala Sitaram, M.A., LL.B.

DEPUTY PRESIDENT:

Mukandi Lal, B.A., Bar-at-Law.

ELECTED MEMBERS.

Body, Association or Constituency represented.	Name.
Agra City (non-Muhammadan Urban)	Lachhmi Narayan Gorb.
Cawnpore City (non-Muhammadan Urban) ..	Babu Ganesh Shankar Vidyasthi.
Allahabad City (non-Muhammadan Urban) ..	Mr. A. P. Dube, Bar-at-Law.
Lucknow City (non-Muhammadan Urban) ..	Pandit Rahas Behari Tewari.
Benares City (non-Muhammadan Urban) ..	Babu Sampurna Nand.
Bareilly City (non-Muhammadan Urban) ..	Babu Jiaram Saksena, M.A., LL.B.
Meerut-*cum*-Aligarh (non-Muhammadan Urban)	Hon'ble Rai Bahadur Lala Sita Ram, M.A., LL.B.
Moradabad-*cum*-Shahjahanpur (non-Muhammadan Urban)	Babu Bhagwati Sahai Bedar.
Dehra Dun district (non-Muhammadan Rural)	Thakur Manjit Singh Rathor.
Saharanpur district (non-Muhammadan Rural)	Chaudhri Mangat Singh.
Muzafarnagar district (non-Muhammadan Rural)	Rai Sahib Lala Jagdesh Prasad.
Meerut district (North) (non-Muhammadan Rural)	Chaudhri Vijeypal Singh, B.A., LL.B.
Meerut district (South) (non-Muhammadan Rural)	Chaudhri Dharamvir Singh.
Bulandshahr district (East) (non-Muhammadan Rural)	Pandit Nanak Chand, M.A., LL.B.
Bulandshahr district (West) (non-Muhammadan Rural)	Thakur Manak Singh.
Aligarh district (East) (non-Muhammadan Rural)	Thakur Pratapbhan Singh.
Aligarh district (West) (non-Muhammadan Rural)	Thakur Bikram Singh.
Muttra district (non-Muhammadan Rural) ..	Thakur Hukum Singh.
Agra district (non-Muhammadan Rural) ..	Raja Kushalpal Singh, M.A., LL.B.
Mainpuri district (non-Muhammadan Rural) ..	Thakur Gulab Singh.
Etah district (non-Muhammadan Rural) ..	Rao Krishna Pal Singh.
Bareilly district (non-Muhammadan Rural) ..	Honor. Lieut Raja Kali Charan Misra
Bijnor district (non-Muhammadan Rural) ..	Lala Neni Saran, B.SC., LL.B.
Budaun district (non-Muhammadan Rural) ..	Babu Raghubir Sahai, B.A., LL.B.
Moradabad district (non-Muhammadan Rural).	Rao Saheb Kunwar Sardar Singh.
Shajahanpur district (non-Muhammadan Rural).	Thakur Sadho Singh, B.A.
Pilibhit district (non-Muhammadan Rural) ..	Pandit Brijnandan Prasad Misra.
Jhansi district (non-Muhammadan Rural) ..	Pandit Bhagwat Narayan Bhargava, B.A.
Jalaun district (non-Muhammadan Rural) ..	Rao Udaibir Singh.
Hamirpur district (non-Muhammadan Rural) .	Thakur Har Prasad Singh.
Banda district (non-Muhammadan Rural) ..	Babu Kishori Prasad, M.A., LL.B.
Farrukhabad district (non-Muhammadan Rural)	Pandit Mulchand Dube, M.A., LL.B.
Etawah district (non-Muhammadan Rural) ..	Pandit Deota Prasad.
Cawnpore district (non-Muhammadan Rural)..	Babu Shyam Lal, M.A., LL.B.

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The Hon'ble Rai Bahadur Lala Sitaram, M.A., LL.B.

DEPUTY PRESIDENT:

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Benares City (non-Muhammadan Urban) ..	Babu Sampurna Nand.
Bareilly City (non-Muhammadan Urban) ..	Babu Jiaram Saksena, M.A., LL.B.
Meerut-cum-Aligarh (non-Muhammadan Urban)	Hon'ble Rai Bahadur Lala Sita Ram, M.A., LL.B.
Moradabad-cum-Shahjahanpur (non-Muhammadan Urban)	Babu Bhagwati Sahai Bedar.
Dehra Dun district (non-Muhammadan Rural)	Thakur Manjit Singh Rathor.
Saharanpur district (non-Muhammadan Rural)	Chaudhri Mangat Singh.
Muzaffarnagar district (non-Muhammadan Rural)	Rai Sahib Lala Jagdesh Prasad.
Meerut district (North) (non-Muhammadan Rural)	Chaudhri Vijeypal Singh, B.A., LL.B.
Meerut district (South) (non-Muhammadan Rural)	Chaudhri Dharamvir Singh.
Bulandshahr district (East) (non-Muhammadan Rural)	Pandit Nanak Chand, M.A., LL.B.
Bulandshahr district (West) (non-Muhammadan Rural)	Thakur Manak Singh.
Aligarh district (East) (non-Muhammadan Rural)	Thakur Pratapbhan Singh.
Aligarh district (West) (non-Muhammadan Rural)	Thakur Bikram Singh.
Muttra district (non-Muhammadan Rural) ..	Thakur Hukum Singh.
Agra district (non-Muhammadan Rural) ..	Raja Kushalpal Singh, M.A., LL.B.
Mainpuri district (non-Muhammadan Rural) ..	Thakur Gulab Singh.
Etah district (non-Muhammadan Rural) ..	Rao Krishna Pal Singh.
Bareilly district (non-Muhammadan Rural) ..	Honor. Lieut Raja Kali Charan Misra
Bijnor district (non-Muhammadan Rural) ..	Lala Neni Saran, B.SC., LL.B.
Budaun district (non-Muhammadan Rural) ..	Babu Raghubir Sahai, B.A., LL.B.
Moradabad district (non-Muhammadan Rural).	Rao Saheb Kunwar Sardar Singh.
Shajahanpur district (non-Muhammadan Rural).	Thakur Sadho Singh, B.A.
Pilibhit district (non-Muhammadan Rural) ..	Pandit Brijnandan Prasad Misra.
Jhansi district (non-Muhammadan Rural) ..	Pandit Bhagwat Narayan Bhargava, B.A.
Jalaun district (non-Muhammadan Rural) ..	Rao Udaibir Singh.
Hamirpur district (non-Muhammadan Rural) .	Thakur Har Prasad Singh.
Banda district (non-Muhammadan Rural) ..	Babu Kishori Prasad, M.A., LL.B.
Farrukhabad district (non-Muhammadan Rural)	Pandit Mulchand Dube, M.A., LL.B.
Etawah district (non-Muhammadan Rural) ..	Pandit Deota Prasad.
Cawnpore district (non-Muhammadan Rural)..	Babu Shyam Lal, M.A., LL.B.

Body, Association or Constituency represented.	Name.
Fatehpur district (non-Muhammadan Rural) ..	Babu Uma Shankar.
Allahabad district (non-Muhammadan Rural) ..	Pandit Venkatesh Narayan Tewari
Benares district (non-Muhammadan Rural) ..	Babu Kanendra Narayan Singh.
Mirazapur district (non-Muahammadan Rural)..	Pandit Shri Sadayatan Pande.
Jannpur district (non-Muhammadan Rural) ..	Raja Sri Krishna Dutt Dube.
Ghazipur district (non-Muhammadan Rural) ..	Thakur Shiva Shankar Singh.
Ballia district (non-Muhammadan Rural) ..	Rai Bahadur Thakur Hahuman Singh.
Gorakhpur district) (West (non-Muhammadan Rural).	Rai Bahadur Babu Abbaninandan Prasad.
Gorakhpur district (East) (non-Muhammadan Rural).	Raja Indrajit Pratab Bahadur Sahi
Basti district (non-Muhammadan Rural) ..	Bhaya Hanumat Prasad Singh.
Azamgarh district (non-Muhammadan Rural) ..	Babu Ganga Prasad Roy.
Naini Tal district (non-Muhammadan Rural) ..	Pandit Govind Ballabh Pant, B.A., LL.B.
Almora district (non-Muhammadan Rural) ..	Pandit Baderi Dutt Pande.
Garhwal district (non-Muhammadan Rural) ..	Mr. Mukandi Lal, B.A. (Oxen).
Lucknow district (non-Muhammadan Rural) ..	Sardar Nihal Singh.
Unao district (non-Muhammadan Rural) ..	Rai Bahadur Chaudhri Jagannath Prasad.
Rae Bareli district (non-Muhammadan Rural)	Raja Bahadur Bishwanath Saran Singh.
Sitapur district (non-Muhammadan Rural) ..	Hon'ble Thakur Rajendra Singh.
Hardoi district (non-Muhammadan Raural) ..	Rai Bahadur Babu Mohan Lal, M.A., LL.B.
Kheri district (non-Muhammadan Rural) ..	Rai Bahadur Pandit Sankata Prasad Bajpai.
Fyzabad district (non-Muhammadan Rural) ..	Babu Mahendra Deva Varma alias Lalji.
Gonda district (non-Muhammadan Rural) ..	Raja Raghuraj Singh, O.B.E.
Bahraich district (non-Muhammadan Rural) ..	Maharaj Kumar Major Mahijit Singh.
Sultanpur distict (non-Muhammada Rural) ..	Rai Bahadur Kunwar Surendra Pratap Sahi.
Partabgarh district (non-Muhammadan Rural)..	Mr. C. Y. Chintamani.
Bara Banki District (non-Muhammadan Rural)	Hon'ble Rai Rajashwar Bali, B.A., O.B.E.
Allahabad-*cum*-Benares (Muhammadan Urban	Mr. Muhammad Zahur Ahmad.
Lucknow-*cum*-Cawnpore (Muhammadan Urban)	Haji Abdul Qayum.
Agra and Meerut-*cum*-Aligarh (Muhammadan Urban).	Mr. Mahammad Abdul Bari.
Bareilly and Shahjahanpur-*cum*-Moradabad (Muhammadan Urban).	Maulvi Zahur-ud-Din, B.A., LL.B.
Dehra Dun district (Muhammadan Rural) ..	Maulvi Tufai Ahmed.
Shaharanpur district (Muhammadan Rural) ..	Khan Bahadur Shaikh Ziaul Haq.
Meerut district (Muhammadan Rural)	Lieut. Nawab Jamshed Ali Khan.
Muzafarnagar district (Muhammadan Rural) ..	Nawabzada Muhammad Liaqat Ali Khan.
Bijnor district (Muhammadan Rural)	Hafiz Muhammad Ibrahim, B.A., LL.B.
Bulandshahr district (Muhammadan Rural) ..	Khan Bahadur Lieut Abdus Sami Khan.
Aligarh, Muttra and Agra district (Muhammadan Rural).	Maulvi Obaidur Rahman Khan.
Mainpuri, Etah and Farrukhabad districts (Muhammadan Rural).	Shaikh Abdulla.
Etawah, Cawnpore and Fatehpur districts (Muhammadan Rural).	Khan Bahadur Hafiz Hidayat Husain, B.A., Bar-at-Law.
Jhansi division (Muhammadan Rural)	Maulvi Saiyid Habib Ullah.
Allahabad, Janupur and Mirzapur districts (Muhammadan Bural).	Hon'ble Nawab Muhammad Yusuf.
Benares, Ghazupur, Ballia and Azamagarh districts (Muhammadan Rural).	Khan Bahadur Shah Badre Alam.

The Punjab.

The Punjab or land of the five rivers, is so called from the five rivers by which it is enclosed, namely, the Jhelum, Chenab, Ravi, Beas and Sutlej. Together with the North-West Frontier Province and the Indian State of Jammu and Kashmir which lie to the north, the Punjab occupies the extreme north-western corner of the Indian Empire, and with the exception of the above-mentioned province comprises all of British India north of Sind and Rajputana and west of the river Jumna. Previous to October 1912, the Punjab with its feudatories embraced an area of 136,330 square miles and a population at the Census of 1911 of 24,187,750 (inclusive of 28,587 trans-frontier Baluchis) that is to say, about one-thirteenth of the area and population of the Indian Empire. But the formation of a separate province of Delhi reduced the area and population of the Punjab by about 450 square miles and 380,000 souls respectively. The total population of the Province in 1921, including the Baloch tribes on the border of the Dehra Ghazi Khan District was 25,101,060 of whom 4,416,036 were in the Indian States.

Physical Features.

The greater part of the Punjab consists of one vast alluvial plain, stretching from the Jumna in the east to the Suleman Range in the west. The north-east is occupied by a section of the Himalayas and the Salt Range forms its north-western angle. A few small spurs of the Aravalli mountain system traverse the extreme south-east and terminate in the Ridge at Delhi. The Punjab may be divided into five natural divisions. The Himalayan tract includes an area of 22,000 square miles, with a scanty population living scattered in tiny mountain hamlets. The Salt Range tract includes the districts of Attock, Rawalpindi and Jhelum and part of Shahpur district. Its physical configuration is broken and confused and the mountainous tracts of Murree and Kahuta approximate closely in characteristics to the Himalayan tract. Except in the hills, the rainfall leaves little margin for protection against distress in unfavourable seasons and irrigation is almost unknown. Skirting the base of the hills and including the low range of the Siwaliks, runs the narrow sub-montane tract. This tract, secure in an ample rainfall, and traversed by streams from the hills, comprises some of the most fertile and thickly populated portions of the province. Its population of over four millions is almost wholly agricultural and pastoral but it includes one large town in Sialkot. Of the plains of the Punjab, the eastern portion covers an area of some 36,000 square miles with a population of 10½ millions. East of Lahore, the rainfall is everywhere so far sufficient that cultivation is possible without irrigation in fairly favourable seasons, but over the greater part of the area the margin is so slight that, except where irrigation is employed, any material reduction in the rainfall involves distress, if not actual famine. Within the eastern plains lie the large cities of Lahore and Amritsar, and the population in comparison with the western Punjab is largely urban. The western plains cover an area of 59,000 square miles, with a population of a little over six millions. The rainfall in this area, heaviest in the north and east and decreasing towards the west and south-is everywhere so scanty that cultivation is only possible with the aid of artificial irrigation or upon the low-lying river-banks left moist by the retreating floods. In this very circumstance, these tracts find their security against famine, for there cultivation is almost independent of rain, a failure of which means nothing worse than a scarcity of grass. So little rain is sufficient, and absolute drought occurs so seldom that the crops may be said never to fail from this cause. The western plains embrace the great colony areas on the Chenab and Jhelum Canals which now challenge the title of the eastern plains as the most fertile, wealthy and populous portions of the province. Multan and Lyallpur are the largest towns in the western area. Owing to its geographical position, its scanty rainfall and cloudless skies, and perhaps to its wide expanse of untilled plains, the climate of the Punjab presents greater extremes of both heat and cold than any other portion of India. The summer, from April to September, is scorchingly hot, and in the winter, sharp frosts are common. But the bright sun and invigorating air make the climate of the Punjab in the cold weather almost ideal.

States.

The Indian States of the Punjab were formerly in the Political charge of the Punjab Government. In 1921, however, the thirteen most important States, including Patiala, Bahawalpur, Jind and Nabha, were formed into a separate "Punjab States Agency" under the control of the Agent to the Governor-General, Punjab States. The only States remaining in the charge of the Punjab Government, are the Simla Hill States, for which the Deputy Commissioner of Simla is Political Officer, and three small States in the Ambala Division, Kalsia, Pataudi and Dujana, which are supervised by the Commissioner of Ambala.

The People.

Of the population roughly one-half is Mahomedan, three-eighths Hindu and one-eighth Sikh. Socially the landed classes stand high and of these the Jats, numbering nearly five millions, are the most important. Roughly speaking, one half the Jats are Mahomedan, one-third Sikh and one-sixth Hindu. In distribution they are ubiquitous and are equally divided over the five divisions of the province. Next in importance come the Rajputs, who number over a million and a half. The majority of them are Mahomedans by religion; about a fourth are Hindus and a very few Sikhs. They are widely distributed over the province. Both Jats and Rajputs of the Punjab provide many of the best recruits for the Indian Army. In fact all the agricultural classes of the Punjab, except in the south-western districts, made a magnificent response to the appeal for recruits in the great war and the province's contribution of upwards of 400,000 men to the man power of the Empire speaks for itself. The Gujars are an important agricultural and pastoral tribe, chiefly found

in the eastern half of the province and in the extreme north-west. In organisation they closely resemble the Jats and are often absorbed into that tribe. There are many minor agricultural tribes, priestly and religious castes (Brahmans, Sayads and Kureshis), most of whom are landholders, the trading castes of the Hindus (Khatris, Aroras and Banias) and trading castes of the Mahomedans (Khojas, Parachas and Khakhas), and the numerous artisan and menial castes. There are also vagrant and criminal tribes, and foreign elements in the population are represented by the Baluchis of Dera Ghazi Khan and neighbouring districts in the west, who number about half a million and maintain their tribal system, and the Pathans of the Attock and Mianwali districts. Pathans are also found scattered all over the province engaged in horse-dealing, labour and trade. A small Tibetan element is found in the Himalayan districts.

Languages.

The main language of the province is Punjabi, which is spoken by more than half the population. Western Punjabi may be classed as a separate language, sometimes called Lahndi, and is spoken in the north and west. The next most important languages are Western Hindi, which includes Hindustani, Urdu (the polished language of the towns) and other Hindi; Western Pahari, which is spoken in the hill tracts; and Rajasthani, the language of Rajputana. Baluchi, Pushto, Sindhi and Tibeto-Burman languages are used by small proportions of the population.

Agriculture.

Agriculture is the staple industry of the province, affording the main means of subsistence to 60·5 per cent. of the population. It is essentially a country of peasant proprietors. About one-sixth of the total area in British districts is Government property, the remaining five-sixths belonging to private owners. But a large part of the Government land is so situated that it cannot be brought under cultivation without extensive irrigation. Thus the Lower Chenab Canal irrigates 2,000,000 acres of what was formerly waste land, the Lower Jhelum Canal, 440,000 acres, and the Lower Bari Doab Canal, adds 10,30,000 acres to this total. Large areas in the hills and elsewhere which are unsuited to cultivation are preserved as forest lands, the total extent of which is about 5,700 square miles. Of the crops grown, wheat is the most important and the development of irrigation has led to a great expansion of the wheat area. Next in importance to wheat is gram. Other important staples are barley, rice, millets, maize, oilseeds (rape, toria and sesamum), cotton and sugarcane. Cotton is grown generally throughout the province. On the Canal irrigated areas the Cotton grown is chiefly American but elsewhere it is the short stapled variety, known as 'Bengals.' The country being preponderantly agricultural, a considerable proportion of the wealth of the people lies in its live-stock. Large profits are derived from the cattle and dairy trades and wool is a staple product in the south west in Kulu and Kangra and throughout the plains generally. The production of hides and skins is also an important industry.

Industries.

The mineral wealth of the Punjab is small rock salt, saltpetre and limestone for road building being the most important products. There are some small coal mines in the Jhelum, Shahpur and Mianwali districts with an output of about 75,000 tons a year, and gold washing is carried on in most of the rivers not without remunerative results. Iron and copper ores are plentiful but difficulties of carriage and the absence of fuel have hitherto prevented smelting on a large scale. The Punjab is not a large manufacturing country, the total number of factories being only 590 the majority of which are cotton ginning and pressing factories. Cotton weaving as a domestic industry is carried on by means of hand looms in nearly every village. The Government Central Weaving Institute, Amritsar, and the Weaving Classes attached to the Government Industrial Schools at Multan, Sialkot, Hoshiarpur, Gujrat, Rohtak and Kulu, have shown considerable enterprise in improving the hand-weaving industry. The Government Demonstration Weaving Factory at Shahdara, (Lahore), which is expected to start operations very shortly, will assist considerably in the development of the power-loom weaving industry of the Province. The Government Hosiery Institute at Ludhiana and the Institute of Dyeing and Calico Printing at Shahdara, (Lahore), are doing useful work in the development of the hosiery and dyeing and calico printing industries respectively. Blankets and woollen rugs are also produced in considerable quantities and the carpets of Amritsar are famous. Silk weaving is also carried on and the workers in Gold, Silver, Brass, Copper and Earthenware are fairly numerous. Ivory carving is carried on extensively at Amritsar and Muzaffargarh as well as in the Patiala State. Mineral Oil is being extracted and refined in the Attock and Rawalpindi Districts respectively and a cement factory is established at Wah near Hassanabdal.

Administration.

Prior to the Amendment of the Government of India Act in 1919 the system of administration was that of a Lieutenant-Governor, drawn from the ranks of the Indian Civil Service. Under the Amended Act the Province was raised to the status of a Governorship, with an Executive Council and Ministers, the Governor-in Council being in charge of the Reserved Subjects and the Governor with his Mini ters of the Transferred Subjects. The general system of provincial administration under this scheme is sketched in the section Provincial Governments (*q. v.*) where is also given a list of the Reserved and Transferred Subjects. Associated with the Governor and the Council and Ministers is an enlarged Legislative Council, with wide powers, whose scope and authority are given under the Legislative Councils (*q.v.*), the system being common to all the major Provinces. The business of Government is carried on through the usual Secretariat which consists of five Secretaries, designated (1) Chief, (2) Home, (3) Finance and (4) Revenue Secretary and Secretary, Transferred Departments, one Deputy Secretary, three UnderSecretaries and two Assistant Secretaries. In the Public Works

Department, there are also three Secretaries, (Chief Engineers), one in the Buildings and Roads branch and two in the Irrigation Branch while the Legal Remembrancer is also Secretary to Government in the Legislative Department. The heads of the Police and Educational Departments are also Under-Secretaries to Government. The Government spends the winter in Lahore and the summer (from the middle of May to the middle of October) in Simla. Under the Governor, the province is administered by five Commissioners (for Ambala, Jullunder, Lahore, Rawalpindi and Multan) who exercise general control over the Deputy Commissioners—29 in number—each of whom is in charge of a district.

The principal heads of Department in the province are the two Financial Commissioners (who are the highest Court of Revenue jurisdiction, and heads of the departments of Land and Separate Revenue and of Agriculture and the Court of Wards), the three Chief Engineers, the Inspector-General of Police, the Director of Public Instruction, the Inspector-General of Prisons, the Inspector-General of Civil Hospitals, the Director of Public Health, the Chief Conservator of Forests, the Directors of Agriculture and Industries, the Inspector-General of Registration, the Registrar of Co-operative Credit Societies and Joint Stock Companies and the Legal Remembrancer.

Justice.

The administration of justice is entrusted to a High Court, which is the final appellate authority in civil and criminal cases, and has powers of original criminal jurisdiction in cases where European British subjects are charged with serious offences and original civil jurisdiction in special cases. The Court sits at Lahore and is composed of a Chief Justice and seven pusine judges (either Civilians or barristers), and three additional judges. Subordinate to the High Court are the District and Sessions Judges (22 in number) each of whom exercises civil and criminal jurisdiction in a civil and session division comprising one or more districts In districts in which the Frontier Crimes Regulation is in force the Deputy Commissioner on the finding of a Council of Elders (Jirga) may pass sentence up to seven years' imprisonment.

Local Self-Government.

Local Self-Government is secured in certain branches of the administration by the constitution of District Boards, each exercising authority over a district; of Municipal, Small Town, and Notified Area Committees each exercising authority over an urban area, and of Panchayats, each exercising authority over a revenue estate or a compact group of revenue estates. The funds of District Boards are derived from a cess on the land revenue of the district supplemented by Government grants, profession taxes and miscellaneous fees, and those of Municipal, Small Town, and Notified Area Committees from octroi or terminal tax and other forms of taxation from Government grants and from rents and miscellaneous fees. The Panchayat system is an attempt to revive the traditional village community organisation, the elected committee or Panchayat possessing certain powers in respect of taxation, local option, civil and criminal justice, the abatement of nuisances and other matters. Most of the Members of practically all local bodies are now elected and elections are usually keenly contested.

Police.

The Police force is divided into District and Railway Police. The combined force is under the control of the Inspector-General, who is a member of the Gazetted force and has under him three Deputy Inspector-Generals and a fourth Deputy Inspector-General in charge of the Criminal Investigation Department and of the Finger Print Bureau at Phillaur. There is a Police Training School at Phillaur controlled by a Principal of the rank of Superintendent of Police. The Railway Police are under an Assistant Inspector-General. The District Police are controlled by Superintendents, each of whom is in charge of a district and has under him one or more Assistant Superintendents or Deputy Superintendents.

Education.

The strides which have been made in the past decennium, especially in the concluding years of the period, have brought the Punjab into line with the older and more forward provinces. The advance has not been confined to any one form of education but is spread over all grades and varieties. In addition to institutions maintained in all parts of the province by private enterprise, Government itself maintains twelve art colleges, (including one for Europeans and another for women), two training colleges, one for Indians at Lahore and another for Europeans at Ghoragali, Six separate normal schools and thirty-nine training classes for teachers of both sexes, ninety-three secondary schools for boys and girls, a reformatory school and fifty-two centres for vocational training. Apart from these Institutions for general education, Government maintains nine higher grade professional institutions, *viz.*, the medical and veterinary colleges and the arts and technical schools at Lahore, the medical school at Amritsar, the Agricultural College at Lyallpur, the Engineering College at Mughalpura and school at Rasul, and the Institute of Dyeing and Calico printing. In addition a hosiery institute has been established at Ludhiana and a central weaving Institute at Amritsar; while there are twenty industrial schools (one for disabled soldiers included) scattered over the province.

The Department of Education is in the charge of the Minister for Education who is assisted in the work of administration by the Director of Public Instruction. The Punjab University controls higher education.

Forests.

Large areas in the hills and elsewhere which are unsuited to cultivation are preserved as forest lands, the total extent of which is about 8,700 square miles.

Medical.

The Medical Department is controlled by the Inspector-General of Civil Hospitals who is at present an officer of the Indian Medical Service holding the rank of Colonel. He is assisted by an Officer designated the Deputy

Inspector-General of Civil Hospitals, who is at present an officer of the Indian Medical Service holding the rank of Lieutenant-Colonel. The Department of Public Health is controlled by the Director of Public Health (also a member of the Indian Medical Service) who for the present has under him five Assistant Directors of Public Health, 37 District Medical Officers of Health, (including three Assistant Epidemiologists), twenty-eight Sanitary Inspectors and twenty-eight Dispensaries of the normal staff, in addition to a Special Staff engaged as required for combating epidemic deseases. The Superintending Engineer, Public Health Circle, is the Technical Adviser of the Department in Engineering matters and this officer and the Director of Public Health are the technical advisers of the Urban Sanitary Board which deals with major sanitary problems—water supply and drainage—affecting Municipal and other Towns.

HEADS OF ACCOUNT.	Budget Estimate, 1928-29.
	(In thousands of Rupees.)
REVENUE RECEIPTS.	
Principal Heads of Revenue.	
II—Taxes on Income ..	3,65
V—Land Revenue	4,87,23
Deduct—Revenue credited to Irrigation.	—1,82,01
Net Land Revenue ..	3,05,22
VI—Excise	1,26, 2
VII—Stamps	1 21,35
VIII—Forests	37,50
IX—Registration	9,50
Total ..	6,03,34
Irrigation.	
XIII—Irrigation—Works for which capital accounts are kept—	
Direct Receipts ..	4,42,50
Indirect credits (Land Revenue due to Irrigation).	1,82,01
Gross amount	6,24,58
Deduct—Working Expenses.	—2,04,36
Net XIII—Irrigation Receipts.	4,20,22
XIV—Irrigation—Works for which no capital accounts are kept.	84
Total ..	4,21,06
Debt Services.	
XVI—Interest	8,27
Civil Administration.	
XVII—Administration of Justice	10,79
XVIII—Jails and Convict Settlements.	5,48
XIX—Police	1,51
XXVI—Miscellaneous Departments	2,51
Total ..	20,29
Beneficent Departments.	
XXI—Education	14,22
XXII—Medical	8,17
XXIII—Public Health	4,15
XXIV—Agriculture ..	10,62
XXV—Industries	1,11
Total ..	38,27

HEADS OF ACCOUNT.	Budget Estimate, 1928-29.
	(In thousands of Rupees.)
Buildings and Roads.	
XXX—Civil Works	6,05
Miscellaneous.	
XXXII—Transfers from Famine Insurance Fund.	....
XXXIII—Receipts in aid of Superannuation.	4,45
XXXIV—Stationery and Printing	1,24
XXXV—Miscellaneous ..	18,62
Total ..	24,38
Contributions and Assignments between Central and Provincial Governments.	
XXXIX-A—Miscellaneous adjustments between the Central and Provincial Governments.	....
Total Revenue Receipts ..	11,21,66
Extraordinary Items.	
XL—Extraordinary Receipts ..	1,51,70
CAPITAL RECEIPTS.	
Loans and Advances	16,63
Famine Insurance Fund	2,00
Permanent Debt, Irrigation Loan..	....
Permanent Debt, Hydro-Electric Loan.	40,00
Appropriation for reduction or avoidance of debt.	2,21
Depreciation Reserve Fund ..	22
Repayment of Loan by Provincial Loans Fund.	....
Deposit to Sinking and Revenue Reserve Funds.	16,22
Total Capital Receipts ..	77,29
BALANCE.	
Opening Balance	1,40,61
Grand Total ..	14,99,26

HEADS OF ACCOUNT.	Budget Estimate, 1928-29.
EXPENDITURE CHARGED TO REVENUE.	(*In thousands of Rupees.*)
Direct demands on the Revenue.	
5—Land Revenue	42,08
6—Excise	14,43
7—Stamps	2,44
8—Forests	26,94
9—Registration	1,08
Total ..	86,97
Irrigation Revenue Account.	
14—Works for which capital accounts are kept (Interest on debt.)	1,25,00
15—Miscellaneous Irrigation Expenditure.	11,92
Total ..	1,36,92
Debt Services.	
19—Interest on Ordinary Debt .	—24,89
21—Reduction or Avoidance of Debt.	3,42
Total ..	—26,46
Civil Administration.	
22—General Administration (Reserved).	1,12,14
22—General Administration (Transferred).	2,12
24—Administration of Justice ..	54,32
25—Jails and Convict Settlements	40,13
26—Police	1,20,11
37—Miscellaneous Departments (Reserved).	84
37—Miscellaneous Departments (Transferred).	25
Total ..	3,29,91
Beneficent Departments.	
30—Scientific Departments ..	36
31—Education (Reserved) ..	7,12
31—Education (Transferred) ..	1,63,27
32—Medical	54,31
33—Public Health	25,14
34—Agriculture	59,44
35—Industries	9,64
Total ..	3,19,28
Buildings and Roads.	
41—Civil Works { Reserved ..	1,33
41—Civil Works { Transferred ..	2,15,02
Total ..	2,16,35
43—Famine Relief and Insurance	3,81
45—Superannuation Allowances and Pensions.	28,80
46—Stationery and Printing (Reserved).	11,22
46—Stationery and Printing (Transferred).	93
47—Miscellaneous (Reserved) ..	5,01
47—Miscellaneous (Transferred) ..	14,98
Total ..	64,80
Contributions and Assignments to Central and Provincial Governments.	
51—Contribution and Assignments to Central Government.	....
51-A—Miscellaneous adjustments between the Central and Provincial Governments.	....
Total ..	....

HEADS OF ACCOUNT.	Budget Estimate, 1928-29.
Miscellaneous.	(*In thousands of Rupees.*)
Transfers to Revenue Reserve Fund	1,500
Total Expenditure charged to Revenue.	11,42,77
CAPITAL EXPENDITURE	
8-A. CHARGED TO REVENUE FORESTS.	4,28
16—Irrigation Works	91,11
35-A—Industrial Development ..	4,98
41-A—Civil Works	27,89
41-B—Hydro Electric Scheme ..	6,00
45-A—Commutation of Pensions.	....
Capital Expenditure charged to Revenue.	1,34,26
Total Expenditure charged to Revenue.	12,77,03
Capital Expenditure not charged to Revenue.	....
52-A—Forest Capital Expenditure	....
55—Construction of Irrigation Navigation Embankment and Drainage Works.	....
56 C—Industrial Development Capital Expenditure.	....
56-D—Hydro Electric Scheme Capital Expenditure.	40,00
60—Civil Works—Capital Expenditure.	....
60 B—Payment of Commuted value of Pensions Capital Expenditure.	6,51
Total Capital Expenditure not charged to Revenue.	46,51
Public Debt discharged Loans from Central Government.	2,21
Loans raised in the Markets:—	
6¾ per cent. Punjab Bonds, 1933	....
5¾ ,, ,, ,, 1927	....
Total ..	2,21
Loans and Advances by Provincial Governments:—	
Loans and Advances (Reserved). .	14,28
,, ,, ,, (Transferred)	23,75
Total ..	38,03
Deposits and Advances:—	
Famine Insurance Fund ..	....
Appropriation for reduction or avoid of Debts:—	
Sinking Fund for Provincial Loans.	1,22
Suspense	....
Depreciation Reserve Fund ..	....
Revenue Reserve Fund ..	....
Deposit with the Government of India.	....
Total ..	1,22
Total Provincial Disbursements	13,65,00
Closing Balances ..	1,34,26
Grand Total	14,99,26

Administration.

Governor, H. E. Sir Geoffrey Fitzhervey de Montmorency, K.C.I.E., K.C.V.O., C.B.E., I.C.S.

PERSONAL STAFF.

Private Secretary, Major D. Pott, D.S.O., M.C.
Aides-de-Camp, Lt. M. W. Whitaker and Lt. A. C. Maynard.
Hon. Aides-de-Camp, Risaldar Major Kishan Singh, M.C., Sardar Bahadur Labh Singh and Risaldar Major Mir Muhammad Vihan.

MEMBERS OF COUNCIL.

The Hon'ble Khan Bahadur Mian Sir Fazl-i Husain, Kt.
The Hon'ble Frederick Walker Kennaway, I.C.S.

MINISTERS.

The Hon'ble Sardar Jogendra Singh, Minister for Agriculture.
The Hon'ble Mr. Manohar Lal, Minister for Education.
The Hon'ble Malik Firoz Khan, Noon, Minister fo. Local Self-Government.

CIVIL SECRETARIAT.

Chief Secretary, H. W. Emerson, C.I.E., C.B.E., I.C.S.
Home Secretary, H. M. Cowen, I.C.S.
Financial Secretary, J. D. Penny.
Secretary, Transferred Departments, J. G. Beazley, I.C.S.
Revenue Secretary, W. R. Wilson, I.C.S.

Public Works Department.

Irrigation Branch.

Secretary, (Southern Canals), R. B. Lala Bhagawati Prasad Varma.
Secretary, (Northern Canals), J. B. G. Smith, C.I.E.
Secretary, (Construction), H. F. Ashton, M.L.C.

Buildings and Roads Branch.

Secretary, A. R. Astbury, M. Inst. C.E.
Financial Commissioners, F. W. Kennaway, I.C.S. *(Revenue)*, H. D. Craik, C.S.I., I.C.S., *(Development.)*

MISCELLANEOUS DEPARTMENTS.

Director of Industries, R. C. Rawlley, M.A., M.Sc., D.S.O. (Lond.).
Director of Agriculture, D. Milne, B. Sc., (Agri.) (Aberdeen.)
Director of Land Records and Inspector General of Registration, Rai Bahadur Lala Arjun Da., M.A., LL.B.
Director of Public Instruction, Sir George Anderson, Kt., M.A., C.I.E.
Inspector General of Police, G. A. Cocks, C.B.E.
Chief Conservator of Forests, W. Mayes, F.C.H.
Inspector General of Civil Hospitals, Colonel J. W. D. Megaw, C.I.E., I.M.S.
Director of Public Health, Lt.-Col. C. A. Gill, I.M.S.
Inspector General of Prisons, Lt.-Col. F. A. Barker, C.B.E., I.M.S.
Accountant-General, C.W.E. Carson, C.I.E.
Postmaster-General, J. R. T. Booth

LIEUTENANT-GOVERNORS OF THE PUNJAB.

Sir John Lawrence, Bart, G.C.B. ..	1856
Sir Robert Montgomery, K.C.B	1859
Donald Friell, McLeod, C.B.	1865
Major-General Sir Henry Durand, K.C.S.I., C.B., died at Tonk, January 1871.	1870
R. H. Davies, C.S.I.	1871
R. E. Egerton, C.S.I.	1877
Sir Charles U. Aitchison, K.C.S.I., C.I.E. ..	1882
James Broadwood Lyal	1887
Sir Dennis Fitzpatrick, K.C.S.I.	1892
William Macworth Yound, C.S.I... ..	1897
Sir C. M. Rivaz, K.C.S.I.	1902
Sir D. C. J. Ibbetson, K.C.S.I., resigned 22nd January 1908.	1907
T. G. Walker, C.S.I. (Offg.) ..	1907
Sir Louis W. Dane, K.C.I.E., C.S.I... ..	1908
James McCrone Douie, (Offg.)	1911
Sir M. F. O'Dwyer, K.C.S.I.	1913
Sir Edward Maclagan, K.C.I.E., C.S.I. ..	1918

GOVERNORS OF THE PUNJAB.

Sir Edward Maclagan, K.C.I.E., C.S.I. ..	1920
Sir Malcolm Hailey, K.C.S.I., C.I.E. ..	1924
Sir Geoffrey, de Montmorency K.C.I.E., K.C.V.O., C.B.E.	1928

PUNJAB LEGISLATIVE COUNCIL.

The Hon'ble Khan Bahadur Chaudhri Shahab-ud-Din, B.A., LL.B.—*President.*
Sardar Habib-ul-lah—*Deputy President.*

MEMBERS AND MINISTERS.

Ex-Officio.

The Hon'ble Khan Bahadur Sir Mian Fazl-i-Hussain, Kt.

The Hon'ble Mr. Frederick Walker Kennaway, I.C.S.

The Hon'ble Sardar Jogendra Singh, Minister for Agriculture, (Sikh), Landholders.

The Hon'ble Mr. Manohar Lal, M.A., Minister for Education, Punjab University.

The Hon'ble Malik Firoz Khan, Noon., Minister for Local Self-Government, Shahpur East (Muhammadan), Rural.

NOMINATED.

Officials.

Kennaway, Mr. F.W., I.C.S., Commissioner, Punjab, Simla.
Sanderson, Mr. R., Officiating Director of Public Instruction, Punjab, Simla.
Penny, Mr. J. D., I.C.S., Secretary to Government, Punjab, Finance Department, Simla.
Emerson, Mr. Herbert, William, C.I.E., C.B.E., I.C.S., Chief Secretary to Government, Punjab, Simla.
Beazley, Mr. J. G., I.C.S., Secretary to Government, Punjab, Transferred Departments, Simla.

Currie, Mr. M. M. L., I.C.S., Legal Remembrancer and Secretary to Government, Punjab, Legislative Department, Simla.
Ashton, Mr. H. F., P.W.D., Irrigation Branch, Punjab, Simla.
Muzaffar Khan, Khan Bahadur Nawab, Director, Bureau of Information, Punjab, Simla.
Gill Lt.-Col. C.A. D.P.H., D.T.M. and H. I.M.S. Director of Public Health, Punjab, Simla.
Wilson Mr. W. E. I.C.S., Revenue Secretary to Government, Punjab, Simoa.
Cowan, Mr. H. M., I.C.S., Home Secretary to Government, Punjab, Simla.
Craik, H. D., C.S.I., I.C.S., Financial Commissioner, Punjab, Simla.
Ogilvie, Mr. C. M.G., Senior Secretary to Financial Commissioner, Punjab, Simla.

Non-officials.

Abdul Kadir, K. B., Shaikh,
Roberts, Mr. Owen, Hall Road, Lahore.
Ratan Chand, R. B. Lala, O.B.E., Honorary Magistrate, Amritsar.
Sheo Narayan Singh, Sardar Bahadur Sardar, C.I.E., Jullundur.
Maya Das, Mr. Ernest, B.A., Secretary, District Board, Ferozpur.
Lalpat Singh, Honorary Captain, S.B., I.O.M., M.V.O., Rohtak.
Owen, Dr. C.A. M.D., Srinagar.
Ghani, M.A., Bar.-at-Law, Lahore.

ELECTED.

Name of Member.	Constituency.
Azal Haq, Chaudhri	Hosiarpur-*cum*-Ludhiana, Rural.
Amad Yar Khan, Daultana, Mian	Multan East (Muhammadan), Rural.
Akbar Ali, Pir, B.A., LL.B.	Ferozepore (Muhammadan), Rural.
Ai Ahmad, Chaudhri	Gujranwala (Muhammadan), Rural.
Balbir Singh, Rao Bahadur, Lieut., Rao, O.B.E	Gurgaon (Non-Muhammadan), Rural.
Bideo Singh, Chaudhri, B.A., B.T.	North-West Rohtak (Non-Muhammadan), Rural
Bhan Singh, Sardar	Sialkot-*cum*-Gurdaspur (Sikh), Rural.
Bdh Raj, Lala, M.A., LL.B.	West Punjab Towns (Non-Muhammadan) Urban.
Bta Singh, Sardar, B.A., LL.B.	Multan Division and Sheikhupura (Sikh), Rural.
Chajju Ram, Chaudhri, C.I.E.	Hissar (Non-Muhammadan) Rural.
Chotu Ram, Rai Sahib, Chaudhri, B.A., LL.B...	South East Rohtak (Non-Muhammadan), Rural.
Dalat Ram, Kalia, Rai Bahadur, Pandit, M.B.E.	East and West Central Towns (Non-Muhammadan), Urban.
Dhnpat Rai, Rai Bahadur, Lala	Punjab Industries.
DinMuhammad, Mr.	East and West Central Towns (Muhammadan), Urban.
DuliChand, Chaudhri	Karnal (Non-Muhammadan), Rural.
FaiMuhammad, Shaikh, B.A., LL.B.	Dera Ghazi Khan (Muhammadan), Rural.
Fath Singh, Sardar Sahib Sardar	Ferozepore (Sikh), Rural.
FazAli, Khan Bahadur, Chaudhri, M.B.E. ..	Gujrat East (Muhammadan) Urban.
Firoud-Din Khan, Rana, B.A., LL.B.	South-East Towns (Muhammadan), Urban.
Gan Ram, Rai Sahib, Lala	Ambala-*cum*-Simla (Non-Muhammadan), Rural.
Gok Chand Narang, Dr., M.A., Ph. D.	North-West Towns (Non-Muhammadan), Urban.
Gop Das, Lala	Lahore and Ferozepore *cum*-Sheikhupura (Non-Muhammadan), Rural.
GraMr. V. F.	Punjab Chamber of Commerce and Trades Association, Commerce.

Name of Member.	Constituency.
Habib Ullah, Sardar	Lahore (Muhammadan), Rural.
Hans Raj, Raizada	Jullundur-*cum*-Ludhiana (Non-Muhammadan), Rural.
Harbakhsh Singh, Sardar	Sheikhpura.
Hari Singh, Sardar	Ambala Division (Sikh), Rural.
Hira Singh, Sardar	Lahore (Sikh), Rural.
Joti Parshad, Lala	South-East Towns (Non-Muhammadan), Urban.
Kartar Singh, Bedi, Baba	Lyallpur (Sikh), Rural.
Kesar Singh, Chaudhri	Amritsar *cum*-Gurdaspur, (Non-Muhammadan), Rural.
Kesho Ram, Sikri, Lala, B.A., LL.B.	Amritsar City (Non-Muhammadan), Urban.
Khan Muhammad Khan, Wagha, Malik ..	Sheikhupura (Muhammadan), Rural.
Kundan Singh, Mahton, Sardar	Hoshiarpur and Kangra (Sikh), Rural.
Labh Singh, Mr., M.A., LL.B. (Cantab).	Rawalpindi Division and Lahore Division North (Non-Muhammadan), Rural.
Maqbool Mahmood, Mir, B.A., B. Lit.	Amritsar (Muhammadan), Rural.
Mohan Lal, Lala, B.A., LL.B.	North-East Towns (Non-Muhammadan), Urban.
Mohindar Singh, Sardar	Ludhiana (Sikh), Rural.
Mubarik Ali Shah, Sayad	Jhang (Muhammadan), Rural.
Muhammad Abdullah Khan, Khan	Muzaffargarh (Muhammadan), Rural.
Muhammad Abdul Rahman Khan, Chaudhri ..	Jullundur (Muhammadan), Rural.
Muhammad Alam, Dr., Shaikh	West Punjab Towns (Muhammadan), Urban.
Muhammad Amin Khan, Khan Bahadur, Malik, O.B.E.	Attock (Muhammadan), Rural.
Muhammad Hayat, Qureshi, Khan Bahadur, Mian, C.I.E.	Shahpur West (Muhammadan), Rural.
Muhammad Husain, Sayad	Montgomery (Muhammadan), Rural.
Muhammad Iqbal, Dr. Sir, M.A., Ph. D. ..	Lahore City (Muhammadan), Urban.
Muhammad Jamal Khan, Leghari, Khan Bahadur Nawab.	Baloch Tumandars (Landholders).
Muhammad Raza Shah, Makhdumzada Sayad Gilani.	Multan West (Muhammadan), Rural.
Muhammad Sadiq, Shaikh	Amritsar City (Muhammadan), Urban.
Muhammad Saif Ullah Khan, Khan Sahib, Khan	Mianwali (Muhammadan), Rural.
Nanak Chand, Pandit, M.A.	Hoshiarpur (Non-Muhammadan), Rural.
Narain Singh, Sardar, B.A., LL.B.	Rawalpindi Division and Gujranwala (Sikh Rural.
Narendra Nath, Diwan Bahadur Raja, M. A. ..	Punjab Landholders (General).
Nur Khan, Risaldar Bahadur	Rawalpindi (Muhammadan), Rural.
Partap Singh, Sardar	Jullundur (Sikh), Rural.
Rahim Bakhsh, Maulvi, Sir, K.C.I.E.	Ambala Division, North-East (Muhammadan), Rural.
Ram Singh, Chaudhri	Kangra (Non-Muhammadan), Rural.
Sadullah Khan, Mian	Lyallpur South (Muhammadan), Rural.
Raghbir Singh, Sardar	Amritsar (Sikh), Rural.
Sewak Ram, Rai Bahadur, Lala	Multan Division (Non-Muhammadan), Rural.
Sahadat Khan, Rai	Lyallpur North (Muhammadan), Rural.
Sikandar Hayat Khan, Lieut. Sardar, M.B.E. ..	(Muhammadan) Landholders.
Talib Mehdi Khan, Malik Nawab Major ..	Jhelum (Muhammadan), Rural.
Manohar Lal, M A., Bar-at-Law	Lahore City (Non-Muhammadan), Urban.
Ujjal Singh, Sardar	Sikh (Urban).
Umar Hayat, Chaudhri	Gujrat, West (Muhammadan), Rural.
Yasin Khan, Chaudhri, B.A., LL.B.	Gurgaon-*cum*-Hissar (Muhammadan), Rural.
Zafrullah Khan, Chaudhri, B.A., LL.B.	Sialkot (Muhammadan), Rural.
Sardar Abnasha Singh, Secretary, Legislative Council.	
Hakim Ahmad Shujua, Assistant Secretary, Legislative Council.	

Burma.

The Province of Burma lies between Assam on the North-West and China on the North-East and between the Bay of Bengal on the West and South-West and Siam on the South-East. Its area is approximately 263,000 square miles, of which 184,000 are under direct British Administration, 16,000 are unadministered and 63,000 belong to semi-independent Native States. The main geographical feature of the country is the series of rivers and hills running fan-like from North to South with fertile valleys in between, widening and flattening out as they approach the Delta. Differences of elevation and rainfall produce great variations in climate. The coastal tracts of Arakan and Tenasserim have a rainfall of about 200 inches, the Delta less than half that amount. The hot season is short and the monsoon breaks early. The maximum shade temperature is about 96°, the minimum about 60°. North of the Delta the rainfall decreases rapidly to 30 inches in the central dry zone which lies in a "rain shadow" and has a climate resembling that of Bihar. The maximum temperature is twenty degrees higher than in the wet zone, but this is compensated by a bracing cold season. To the north and east of the dry zone lie the Kchin hills and the Shan plateau. The average elevation of this tableland is 3,000 feet with peaks rising to 9,000. Consequently it enjoys a temperate climate with a rainfall of about 70 inches on the average. Its area is over 50,000 square miles. There is no other region of similar area in the Indian Empire so well adapted for European colonization. The magnificent rivers, the number of hilly ranges (Yomas) and the abundance of forests, all combine to make the scenery of Burma exceedingly varied and picturesque.

The People.

The total population of Burma at the census of 1921 was 13,169,099. There were 8,382,335 Burmans, 1,017,987 Shans, 1,220,356 Karens, 1·845 Kachins, 288,847 Chins, 300,700 Arakanese, 323,509 Talaings and 122,257 Taungyos. There is also a large alien population of 149,060 Chinese and 887,877 Indians. while the European and Anglo-Indian population numbered 25,005, and Indo-Burmans, 12,71.

The Burmans, who form the bulk of the population, belong to the Tibetan group and their language to the Tibeto-Chinese family. They are essentially an agricultural people, 80 per cent of the agriculture of the country being in their hands. The Burmese, and most of the hill tribes also, profess Buddhism, but Animism or the worship of nature spirits, is almost universal. The interest taken by the Burmese in the course of the war, their response to the call for recruits and their generous contributions to war loans and charitable funds seem to show that their apathy towards the government of the country is giving way to an intelligent loyalty to British rule.

In appearance the Burman is usually somewhat short and thick set with Mongolian features. His dress is most distinctive and exceedingly comfortable. It consists of a silk handkerchief bound round his forehead, a loose jacket on his body and a long skirt or longyi tied round his waist, reaching to his ankles. The Burmese women, perhaps the most pleasing type of womanhood in the East, lead a free and open life, playing a large part in the household economy and in petty trading. Their dress is somewhat similar to the men's minus the silk kerchief on the head, and the longyi is tucked in at the side instead of being tied in front. A well dressed and well groomed Burmese lady would, for grace and neatness, challenge comparison with any woman in the world.

Communications.

The Irrawaddy, and to a less extent the Chindwin, afford great natural thoroughfares to the country. At all seasons of the year these rivers, especially the Irrawaddy, are full of sailing and steam craft. In the Delta the net-work of waterways is indeed practically the only means of communication. The Irrawaddy Flotilla Company, with a fine fleet of mail, cargo and ferry boats, gives the Irrawaddy and the Delta rivers and creeks a splendid river service.

The Burma Railways Company has a length of 1908, 46 miles open line. The principal lines are from Rangoon to Mandalay; from Sagaing to Myitkyina, the most northern point in the system; the Rangoon-Prome line; and the Pegu-Martaban line, which serves Moulmein on the further bank of the Salween River.

Industry.

Agriculture is the chief industry of the province and supports nearly three-fourths of the population. The nett total cropped area is 16½ million acres of which nearly ¾ million acres are cropped more than once. Irrigation works supply water to nearly 1 million acres. India is very largely dependent on Burma for her supplies of kerosene, benzine and petrol which rank second to rice in order of importance. Teak wood is exported in large quantities from Burma to India.

Forests play an important part in the industrial life of the Province. The forest reserves cover some 32,128 square miles, while unclassed forests are estimated at about 115,346 square miles. Government extracts some 50,366 tons of teak annually, private firms, of whom the Bombay Burma Trading Corporation and Steel Brothers are the chief extract over 440,648 tons. Other timber extracted by licensees amounts to over 589,139 tons and firewood over 1,128,964 tons.

Tin and wolfram are found chiefly in the Tavoy and Mergui Districts. Wolfram and tin are found together in most mining areas in Tavoy, the proportion varying from almost pure tin to almost pure wolfram. The rise in the price of tin has revived the tin mining industry in the Tavoy and Mergui Districts.

Owing to a depression in the market, most of the wolfram mines have closed down. Silver, lead and zinc ore are extracted by the Burma Corporation at Bawdwin in the Northern Shan States. Copper in small quantities is also found there. There are small deposits of Molybdenite in Tavoy and Mergui and of

platinum in Myitkyina. The output of precious stones from the ruby mines has declined. Gold dredging in the Myitkyina District has proved unprofitable and the company has been wound up. From the mines in the Hukong valley jade and amber are won. The oldest and largest oil field in the province is at Yenangyaing in Magwe district where the Burma Oil Company has its chief wells. But borings in other districts have shown that the oil-bearing strata extend over a large part of the dry zone, and the output from the smaller fields in Pakokku and Minbu districts is now considerable, while the wells sunk in Thayetmyo district are also showing satisfactory returns. Two-thirds of the total production comes from the Yenangyaung and Singu fields. The Burma Oil Company take their oil to the refineries at Rangoon by pipe line from Singu and Yenangyaung. Other companies take it down by river flats. The area under rubber is 86,000 acres.

Manufactures.

There are 1007 factories, over two-fifths of which are engaged in milling rice and over one-fifth are sawmills. The remainder are chiefly engineering works, cotton ginning mills, oil mills for the extraction of oil from groundnuts, and oil refineries connected with the petroleum industry. The average daily number of operatives is over 100,000. At the Census of 1921, 1,935,729 or 2·848 per cent. of the total population were engaged outside agriculture and production.

As is the case in other parts of the Indian Empire, the imported and factory made article is rapidly ousting the home-made and indigenous. But at Amarapura in the Mandalay District a revival has taken place of hand silk-weaving. Burmese wood-carving is still famous and many artists in silver still remain, the finish of whose work is sometimes very fine. Bassein and Mandalay parasols are well known and much admired in Burma. But perhaps the most famous of all hand-made and indigenous industries is the lacquer work of Pagan with its delicate patterns in black, green, and yellow traced on a ground-work of red lacquer over bamboo. A new art is the making of bronze figures. The artists have gone back to nature for their models, breaking away from the conventionalized forms into which their silver work had crystallized and the new figures display a vigour and life that make them by for the finest examples of art the province can produce.

Administration.

Burma, which was at that time administered as a Lieutenant-Governorship, was deliberately excluded from the operation of the Reform Act of 1919. It was felt that the Province differed so markedly from the other Provinces in the Indian Empire that its requirements should be separately considered. After repeated discussions the question was referred to a special Burma Reforms Committee, which in 1922 recommended that all the essential provisions of the Reform Act should be applied to the Province. This recommendation was accepted and its proposals became law. Under this Act Burma became a Governor's Province, with an executive council and ministers, and conforms to the provinces recreated under the Act of 1919 (q.v.). The main difference is in the size of the electorate. Under the franchise accepted, the rural electorate is estimated at 1,738,871 and the urban electorate has been put as high as 82,478. The Legislative Council consists of 103 members, of which 80 are elected and the balance nominated. Owing to the special status of women in Burma, female franchise was a dopted from the beginning.

Burma is divided administratively into Upper Burma (including the Shan States and Chin Hills) and Lower Burma. The Shan States are administered by the Chiefs of the States, subject to the supervision of the Commissioner, Federated Shan States, who is also Superintendent for the Southern Shan States, and the Superintendent of the Northern Shan States. The Northern and Southern Shan States were formed into a Federation on the 1st October 1922, and are designated the F. S. States. The other Shan States in Burma are subject to the supervision of the Commissioner, Sagaing Division. The Civil Criminal and Revenue administration is vested in the Chief of the State, subject to the restrictions contained in the sanad. The law administered is the customary law of the State.

Under the Governor are eight Commissioners of divisions, three in Upper, four in Lower Burma and one in the Federated Shan States.

Justice.

The administration of Civil and Criminal Justice is under the control of the High Court of Judicature at Rangoon, which consists of a Chief Justice and ten other permanent Judges. The Superior Judicial Service consists of District and Sessions Judges; there are also separate Provincial and Subordinate Judicial Services.

All village headmen have limited magisterial powers and a considerable number are also invested with civil jurisdiction to a limited extent.

In pursuance of the policy of decentralization steps were taken in 1917 to restore to the village headmen the power and influence which they possessed in Burmese times before the centralizing tendencies of British rule made them practically subordinate officers of the administration.

Public Works

This Department is administered by two Chief Engineers. Tjere is a Deputy Chief Engineer (Buildings and Roads), besides 11 permanent Superintending Engineers (*i.e.*, 7 for Buildings and Roads and 4 for Irrigation) and 87 Executive Engineers and Assistant Executive Engineers. There are also a Consulting Architect, Electrical Inspector, Water and Sewerage Engineer (Specialist posts) and a River Training Expert, the incumbents of which are stationed at Headquarters.

Police.

The Police Force is divided into Civil, Military and Rangoon Town Police. The first two are under the control of the Inspector-General of Police, the latter is under the orders of the Commissioner of Police, Rangoon, an officer of the rank of

Deputy Inspector-General. There is a Dy. Inspector-General, Administration, in charge of administrative detail of the Civil Police, and five other Deputy Inspectors-General, one each for the Northern, Southern and Western Ranges, one for the Railway and Criminal Investigation Department and one for the Military Police.

A special feature of Burma is the Military Police. Its officers are deputed from the Indian Army. The rank and file are recruited from natives of India with a few Kachins, Karens and Chins. The experiment of recruiting Burmese on a small scale has been successful. The organisation is military, the force being divided into battalions. The object of the force is to supplement the regular troops in Burma. Their duties, apart from their military work, is to provide escorts for specie, prisoners, etc., and guards for Treasuries, Jails and Courts.

Education.

At the head is the Director of Public Instruction with an Assistant Director, both belonging to the Indian Educational Service. There are nine Inspectors of Schools drawn from the Indian Educational Service, while the Burma Educational Service provides eight Assistant Inspectors. There is also an Inspectress of Schools. There is a Chief Educational Officer for the Federated Shan States.

A centralized, teaching and residential University for Burma, has been established in Rangoon. It now provides courses in Art, Science, Law, Education, Economics, Engineering, Medicine and Forestry.

A remarkable feature of education in Burma is the system of elementary education evolved, generations ago, by the genius of the people. Nearly every village has a monastery (hpoongyi-kyaung); every monastery is a village school and every Burman boy must, in accordance with his religion, attend that school, shaving his head and for the time wearing the yellow robe. At the hpoongyi-kyaungs the boys are taught reading and writing and an elementary native system of arithmetic. The result is that there are very few boys in Burma who are not able to read and write.

Among special institutions, the Government Technical Institute, Insein, provides courses in Mechanical, Civil and Electrical Engineering and the Agricultural College, Mandalay, courses in Agriculture.

A liberal scheme of State Scholarships provides for the despatch of 12 scholars to Europe each year.

Medical.

The control of the Medical Department is vested in an Inspector-General of Civil Hospitals. Under him are 41 Civil Surgeons. There is also a Director of Public Health, two Assistant Directors of Public Health, the senior of whom is also Director, Public Health Institute, to which is attached a Malaria Bureau, an Inspector-General of Prisons, three whole time Superintendents of Prisons, a Chemical Examiner and Bacteriologist and a Superintendent of the Mental-Hospital.

There is also a Hygiene Publicity Officer.

The Pasteur Institute was opened in Rangoon in July 1915. The Director is a senior member of the Indian Medical Service.

THE FINANCES OF BURMA.

In common with the other Provinces of India, the financial arrangements between the Government of India and the Government of Burma underwent a remodelling in consequence of the reconstitution of the Province on the lines of the other Indian Provinces. The Provinces obtained substantial financial independence. The present position is set out in the following statement :—

ESTIMATED RECEIPTS FOR 1928-29.

(A) *REVENUE RECEIPTS—ORDINARY.*	Rs.
Taxes on Income	13,00,000
Land Revenue	5,42,00,000
Excise	1,24,00,000
Stamps	73,50,000
Forest	2,06,00,000
Registration	7,50,000
Scheduled Taxes	5,00,000
State Railways	....
Irrigation, etc., Works with Capital Accounts	28,70,000
Irrigation, etc., Works (No Capital Accounts)	1,50,000
Interest	11,06,000
Administration of Justice	15,00,000
Jails and Convict Settlements	7,00,000
Police	6,24,000

Ports and Pilotage	1,50,000
Education	6,00,000
Medical	3,00,000
Public Health	1,00,000
Agriculture	75,000
Industries	5,000
Miscellaneous Departments	2,00,000
Civil Works	11,00,000
Receipts in Aid of Superannuation	1,50,002
Stationery and Printing	1,20,000
Miscellaneous	4,20,009
Total (*a*)	10,72,20,000

(*B*) *REVENUE RECEIPTS—EXTRAORDINARY.*

Extraordinary Receipts	....
Total (*a*) & (*b*)	10,72,50,000

(*C*) *DEBT HEADS.*

Famine Insurance Fund	80,000
Depreciation Fund—Government Presses	65,000
Depreciation Fund—Commercial Concerns	50,000
Loans and Advances by Provincial Governments	23,48,000
Advances from Provincial Loans Fund	1,30,00,000
Total (*c*)	1,55,43,060
Total (*a*), (*b*) and (*c*)	12,27,93,000
Opening Balance	45,00,060
Grand Total	12,72,93,000

ESTIMATED DISBURSEMENTS FOR 1928-29.

(*A*) *EXPENDITURE CHARGED TO REVENUE.*

	Rs.
Land Revenue	81,03,000
Excise	21,69,000
Stamps	1,74,000
Forest	82,97,000
Forest Capital Outlay	10,95,000
Registration	2,00,0000
State Railways	....
Miscellaneous Railway Expenditure	....
Construction of Railways	....
Interest on Works with Capital Accounts	22,57,000
Other Revenue Expenditure	10,67,000
Construction of Irrigation Works, etc.	12,09,000
Interest on Ordinary Debt	—24,13,000
General Administration	1,09,48,000
Administration of Justice	69,10,000
Jails and Convict Settlements	34,83,000
Police	1,52,91,000

Ports and Pilotage ..	13,09,000
Scientific Departments ..	68,000
Education ..	1,31,81,000
Medical ..	51,31,000
Public Health ..	31.02,000
Agriculture ..	22,35,000
Industries ..	4,23,000
Miscellaneous Departments ..	3,69,000
Civil Works ..	2,58,85,000
Famine Relief, etc. ..	67,000
Superannuation Allowances and Pensions ..	41,29,000
Commutation of Pensions ..	....
Stationery and Printing ..	12,44,000
Miscellaneous ..	18,43,000
Contributions to Central Government ..	....
Extraordinary Charges ..	70,000
Total (*a*)	11,78,46,000

(B) EXPENDITURE NOT CHARGED TO REVENUE.

Construction of Irrigation, etc., Works ..	16,80,000
Payment of Commuted Value of Pensions ..	17,45,000
Total (*b*)	34,25,000
Total (*a*) & (*b*)	12,12,71,000

(C) DEBT HEADS.

Depreciation Fund—Government Presses ..	54,000
Loans and Advances ..	26,87,000
Advances from Provincial Loans Fund ..	2,18,000
Total (*c*) ..	29,59,000
Total (*a*), (*b*), & (*c*) ..	12,42,30,000
Closing Balance ..	30,63,000
Grand Total ..	12,72,93,000

Administration.

Governor, H. E. Sir Charles Innes, K.C.S.I., C.I.E., I.C.S.

Private Secretary, Captain Thomas Wynford Rees, D.S.O., M.C., 5-6th Rajputana Rifles.

Aide de-Camp, Captain R. Ashley, 2nd Battalion, Wiltshire Regiment (Duke of Edinburgh's).

Honorary Aides-de-Camp, Capt. Charles Richard Goad, R.I.M., and Lieut-Col. H.H. McGann, I.A.

Indian Aides-de-Camp, Subadar-Major and Hon. Lt. Bhagbir Yakha, Bahadur, Naib Commandant Sarran Singh, Sardar Bahadur and Naib Commandant Jalal Din, Khan Bahadur.

EXECUTIVE COUNCIL.

The Hon'ble Mr. Samuel Andrew Smyth, C.S.I., B.A., I.C.S.

The Hon'ble Sir Joseph Augustus Maung Gyi, Kt., Bar-at-Law.

Ministers.

The Hon'ble U Ba Yin, M.B., Ch.B.

The Hon'ble Mr. Lee Ah Yain, Bar-at-Law.

Miscellaneous Appointments.

Director of Agriculture, Andrew McKerral, M.A.

Consulting Architect, S. P. Bush.

Commissioner, Federated Shan States, Taunggyi Southern Shan States, I. G. Lloyd, B.A., I.C.S.

Superintendent, Northern Shan States, G. E. Harvey, B.A., I.C.S.

Director of Public Instruction, C. A. Snow, M.A.

Inspector-General of Police, Major C. de M. Wellborne, O.B.E., I.A.

Chief Conservator of Forests, H. W. A. Watson.

Inspector-General of Civil Hospitals, Colonel W. H. C. Forster, M.B., I.M.S.

Director of Public Health, Lt.-Col. E. Bisset, I.M.S.

Inspector-General of Prisons, Lt.-Col. P. K. Tarapore, I.M.S.

Commissioner of Excise, John Brown Marshall, M.A. B.SC., C.I.E., I.C.S.

Financial Commissioner (Reserved Subjects), Offg., Charles Frederick Grant, M.A., I.C.S.,

Financial Commissioner (Transferred Subjects), Charles William Dunn, C.I.E., B.A., I.C.S.

Postmaster-General, Frank Thomas de Monte.

Chief Commissioners of Burma.

Lieut.-Colonel A. P. Phayre, C.B.	1862
Colonel A. Fytche, C.S.I.	1867
Lieut.-Colonel R. D. Ardagh	1870
The Hon. Ashley Eden, C.S.I.	1871
A. R. Thompson, C.S.I.	1875
C. U. Aitchison, C.S.I.	1878
C. E. Bernard, C.S.I.	1880
C. H. T. Crosthwaite	1883
Sir C. E. Bernard, K.C.S.I.	1886
C. H. T. Crosthwaite, C.S.I.	1887
A. P. MacDonnell, C.S.I. (*a*)	1889
Alexander Mackenzie, C.S.I.	1890
D. M. Smeaton	1892
Sir F. W. R. Fryer, K.C.S.I.	1895

(*a*) Afterwards (by creation) Baron MacDonnell.

Lieutenant-Governors of Burma.

Sir F. W. R. Fryer, K.C.S.I.	1897
Sir H. S. Barnes, K.C.S.I., K.C.V.O.	1903
Sir H. T. White, K.C.I.E.	1905
Sir Harvey Adamson, Kt., K.C.S.I., LL.D.	1910
Sir Harcourt Butler, K.C.S.I., C.I.E.	1915
Sir Reginald Craddock, K.C.S.I.	1917

Governors of Burma.

Sir Harcourt Butler, G.C.I.E., K.C.S.I.	1922
Sir Charles Innes, K.C.S.I., K.C.I.E., I.C.S.	1927

SECRETARIES, DEPUTY SECRETARIES, UNDER-SECRETARIES, Etc., TO GOVERNMENT.

J. Clague, B.A., I.C.S.	Chief Secretary, Home and Political Department.
A. E. Gilliat, I.C.S.	Secretary, Finance Department.
W. H. Payton, B.A., I.C.S.	Officiating Secretary, Education Department
C. R. P. Cooper, B.A., I.C.S.	Secretary, Revenue Department.
F. H. Stevenson, I.C.S.	Secretary, Forest Department.
U. Moung Gale (8) K.S.M., B.A.	Secretary, Local-Government Department.
H. L. Nichols, B.A., I.C.S.	Secretary, Judicial Department.
J. B. G. Bradley, B.A., I.C.S.	Under-Secretary, Home and Political Department.
U. Kyaw Min, B.A., I.C.S.	Under-Secretary, Finance Department.
U. Ba Si, S., B.A.	Under-Secretary, Education Department.
U. Shwe Sein, B.A.	Under-Secretary, Forest Department.
C. O. Edge	Under-Secretary, Revenue Department.
U. Kyaw (3), B.A.	Under-Secretary, Judicial Department.
U. Maung Maung, I.C.S.	Under-Secretary, Local-Government Department.
Rai Sahib A. T. Basu	Assistant Secretary, Finance Department.
Rai Sahib K. M. Basu, B.A.	Assistant Secretary, Home and Political Department.
J. U. D'Costa	Registrar, Home and Political Department.
G. Stracey	Registrar, Office of Secretary, Education and Local Government Department.
P. J. Sim	Registrar, Finance and Revenue Secretary's Office.
S. B. Ghosh, B.A., B.L.	Registrar, Office of Secretary, Forest Department.
J. M. Smith	Registrar, Public Works Department.

FINANCIAL COMMISSIONERS.

C. F. Grant M.A., I.C.S.	Financial Commissioner. (Reserved Subjects,) (Officiating.)
C. W. Dunn, C.I.E., B.A.	Financial Commissioner. (Transferred Subjects.) (Officiating.)
U. Ba Zan, B.A.	Secretary to Financial Commissioner. (Reserved Subjects.)
U. Chit Maung, A.T.M., B.A.	Secretary to Financial Commissioner (Transferred Subjects.)

BURMA LEGISLATIVE COUNCIL

PRESIDENT.

The Hon. Mr. Oscar de Glanville, C.I.E., O.B.E., Bar.-at-Law.

DEPUTY PRESIDENT.

U Paw Tun, A.T.M.,Bar.-at-Law.

Ex-Officio Members.

OFFICIALS.

The Hon'ble Mr. Samuel Andrew Smyth, C.S.I., I.C.S.
The Hon'ble Sir Joseph Augustus Maung Gyi, KT. Barrister-at-Law.

MINISTERS.

The Hon'ble Dr. Ba Yin, M.B., CH. B.
The Hon'ble Mr. Lee Ah Yain, K.I.H., Barrister-at-Law

Nominated Members.

OFFICIALS.

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Arthur Eggar, Bar.-at-Law.
Charles Robert Plant Cooper, I.C.S.
John Clague, I.C.S.
H. L. A. Watson.
Harold Lacy Nichols, I.C.S.
Algernon Earle Gilliat, I.C.S.
H. Lushington Holman Hunt, I.C.S.
U Maung Gale (S), K.S.M.
Major Cyril de Montfort Wellborne, O.B.E., I.A.
Charles William Dunn, C.I.E., I.C.S.
William Browne Brander, C.B.E., C.I.E., I.C.S.
Lieut-Col. Ernest Bisset, M.B., Ch. B., I.M.S.
Charles Frederick Grant, I.C.S.

Non-officials.

Adamjee Hajee Dawood Merchant.
U Lun, K.S.M.
Dr. N. N. Parakh, L.F.P. & L.M.S. (Glas.), L.S.A. (Lon.).
A. Narayana Rao, M.A.
U Po Yin.
U Po Thin, Q.T.M.
John Richard Donovan Glascott, C.I.E., Agent, Burma Railways.
William Thomson Howison.

ELECTED MEMBERS.

Name of Member.	Name and class of constituency represented.
U Mra Tun	Akyab Town (General Urban).
S. Jone Bin	Bassein Town (General Urban).
U Sein Ba	Henzada Town (General Urban).
U Aye Maung	Mandalay Town (General Urban).
U Maung Gale	
U Ba U.	
U Pe Aung	Moulmein (General Urban).
U Tun Win	

Name of Member.	Name and class of constituency represented.
U Ni, Bar.-at-Law	Prome Town (General Urban).
The Hon'ble Dr. Ba Yin, M.B., CH.B	East Rangoon (General Urban).
U Ba Pe, B.A.	
Keng Beng Chong	West Rangoon (General Urban).
U Ba Tin	
L. H. Wellington	Tavoy Town (General Urban.)
R. K. Ghose	Akyab Indian Community (Indian Urban).
Promotha Nath Chowdhury	Bassein Indian Community (Indian Urban).
L. K. Mitter	Mandalay Indian Community (Indian Urban).
Mirza Mahomed Rafi, Bar.-at-Law	Moulmein Indian Community (Indian Urban).
S. A. S. Tyabji	East Rangoon Indian Community (Indian Urban).
D. Venkataswamy	
Mahomed Auzam, Bar.-at-Law	West Rangoon Indian Community (Indian Urban).
E. P. Pillay	
Saw Po Chit, Bar.-at-Law	Amherst Karen Community (Karen Rural).
Sra Shwe Ba	Bassein Karen Community (Karen Rural).
Saw Toe Khut	Ma-ubin Karen Community (Karen Rural).
U Myat Pon	Myaungmya Karen Community (Karen Rural)
U Thein Maung	Thaton Karen Community (Karen Rural).
U Chit Pu	Amherst (General Rural).
U Saw Hla Aung	Akyab District East (General Rural).
E. G. Maracan	Akyab District West (General Rural).
U Aung Gyi	South Arakan (General Rural).
U Kala	Bassein District (General Rural).
U Ba	Hanthawaddy East (General Rural).
U Ba So, Bar.-at-Law	Hanthawaddy West (General Rural).
U Tun Lin, T.P.S.	Henzada District North (General Rural).
U Ba Myin	Henzada District South (General Rural).
U Po Hla	Insein (General Rural).
U Po Thin	Katha (General Rural).
U San Pe	Kyaukse (General Rural).
U Ko Gyi	Lower Chindwin East (General Rural).
U Po Shein	Lower Chindwin West (General Rural).
U Khant	Magwe East (General Rural).
.. ..	Magwe West (General Rural).
U Kyaw Dun, T.P.S.	Mandalay District (General Rural).
U Ba Thwe	Ma-ubin (General Rural).
U Po Tun, T.P.S	Meiktila East (General Rural).
U Mya	Meiktila West (General Rural).
U Shwe Yun	Mergui (General Rural).
U Pan	Minbu (General Rural).

Name of Member.	Name and class of constituency represented.
U Po Lu	Mayungmya (General Rural).
U Mya, T.P.S.	Myingyan North (General Rural).
U Ba Zone	Myingyan South (General Rural).
U Myint Thein, Bar.-at-Law	Pakokku East (General Rural).
U Me, T.P.S.	Pakokku West (General Rural).
U Ho Kim Seng	Pegu North (General Rural).
U Kya Gaing, Bar.-at-Law	Pegu South (General Rural).
U Thein Maung, B.A., M.M.F.	Prome District (General Rural).
U Ba Byu	Pyapon (General Rural).
U Maung Maung	Sagaing East (General Rural).
U Tha Zan	Sagaing West (General Rural).
U Maung Lu	Shwebo East (General Rural).
U Ba Din	Shwebo West (General Rural).
U C. Soo Don	Tavoy District (General Rural).
U Ba Han	Tharrawaddy North (General Rural).
U Lu Gyi	Tharrawaddy South (General Rural)
U Po Chit	Thaton (General Rural).
U San Lu	Thayetmyo (General Rural).
U Maung Maung	Toungoo North (General Rural).
U Pu Tharrawaddy	Toungoo South (General Rural).
U Paw Tun, A.T.M., Bar.-at-Law (Deputy President).	Yamethin North (General Rural).
U Pu, B.A., Bar.-at-Law	Yamethin South (General Rural).
Charles Haswell Campagnac, M.B.E., Bar.-at-Law.	Anglo-Indian (Anglo-Indian).
Oscar de Glanville, O.B.E., Bar.-at-Law ..	European (European).
Jules Emile Du Bern, O.B.E.	Burma Chamber of Commerce (Commerce).
The Hon'ble Mr. Lee Ah Yain, K.I.H., Bar-at-Law.	Chinese Chamber of Commerce (Commerce).
Vacant.	Rangoon Trades Association (Chambers).
Lieut.-Colonel U Ba Ket, I.M.S. (Retd.). ..	Rangoon University.

SECRETARY

U Ba Dun, Bar.-at-Law.

Bihar and Orissa.

Bihar and Orissa lies between 19°-02′ and 27°-30′ N. latitude and between 82°-31′ and 88°-26′ E. longitude and includes the three provinces of Bihar, Orissa and Chota Nagpur, and is bounded on the north by Nepal and the Darjeeling district of Bengal; on the east by Bengal and the Bay of Bengal; on the south by the Bay of Bengal and Madras; and on the west by the United Provinces of Agra and Oudh and the Central Provinces.

The area of the British territories which constitute the Governorship of Bihar and Orissa is 8,380 square miles inclusive of the area of large rivers. In addition to the districts which are directly under British rule, there are two groups of petty States which lie to the south and south-west of the Province and which under the names of the Feudatory States of Orissa and Chota Nagpur are governed each by its own Chief under the superintendence and with the advice of the Political Agent and Commissioner, Orissa Feudatory States. The area of these territories is 28,656 square miles and as it is usual to include them when speaking of Bihar and Orissa the area of the whole Province may be stated at 111,828 square miles. Two of the provinces of the Governorship of Bihar and Orissa, *viz.*, Bihar and Orissa, consist of great river valleys, the third, Chota Nagpur, is a mountainous region which separates them from the Central Indian Plateau. Orissa embraces the rich deltas of the Mahanadi and the neighbouring rivers and is bounded by the Bay of Bengal on the south-east and walled in on the north-west by the hilly country of the Tributary States. Bihar lies on the north of the Province and comprises the valley of the Ganges from the spot where it issues from the territories of the Governor of the United Provinces of Agra and Oudh till it enters Bengal near Rajmahal. Between Bihar and Orissa lies Chota Nagpur. Following the main geographical lines there are five Civil Divisions with headquarters at Patna, Muzaffarpur (for Tirhut), Bhagalpur, Cuttack (for Orissa) and Ranchi (for Chota Nagpur).

The People.

The headquarters of Government are at Patna. The new capital which lies between the Military Cantonment of Dinapore and the old civil station of Bankipore is known as "Patna," the old town being called "Patna City."

The Province has a population of 37,961,858 persons which is very little less than that of France and rather more than that of the Bombay Presidency. The province is almost entirely rural, no fewer than 963 in every 1,000, live in villages. Even so with 339 persons per square mile, Bihar and Orissa is more thickly populated than Germany. There are only three towns which can be classed as cities, namely, Patna, Gaya and Bhagalpur. During the last thirty years the population of Patna has been steadily diminishing. Hindus form an overwhelming majority of the population. Though the Muhammadans form less than one-tenth of the total population they constitute more than one-fifth of urban population of the province. Animists account for 6·16 per cent. These are inhabitants of the Chota Nagpur plateau and the Santal Parganas, the latter district being a continuation of the plateau in a north-easterly direction.

Industries.*

The principal industry is agriculture, Bihar more especially North Bihar, being the "Garden of India." Rice is the staple crop but the spring crops, wheat, barley, and the like are of considerable importance. It is estimated that the normal area cultivated with rice is 15,320,700 acres or 48 per cent. of the cropped area of the Province. Wheat is grown on 1,265,909 acres, barley on 1,406,100 acres, maize or Indian-corn on 1,637,500 acres, the latter being an autumn crop Oil-seeds are an important crop, the cultivation having been stimulated by the demand for them in Europe. It is estimated that 2,091,400 acres of land are annually cropped with oil-seeds in the Province. There is irrigation in Shahabad, Gaya, Patna and Champaran districts in Bihar and in Balasore and Cuttack in Orissa. The Indigo industry is steadily on the decline, the total area sown having decreased from 342,000 acres in 1896 to 25,000 acres in 1923. The principal cause of this was the discovery of the possibilities of manufacturing synthetic or chemically prepared indigo on a commercial scale. Its place as a crop manufactured for export has been largely taken by sugarcane, the cultivation of which has been considerably extended owing to the high prices given by sugar factories. In the district of Purnea and in Orissa, and parts of the Tirhut Division jute is grown, but the acreage varies according to the price of jute. The last serious famine was in 1895-96, but there was a serious shortage of foodstuffs in the south of the Province in 1919. In any year in which monsoon currents from either the Bay of Bengal or the Arabian Sea are unduly late in their arrival or cease abruptly before the middle of September the agricultural situation is very grave. It may be said that for Bihar the most important rainfall is that known as the *hatia,* due towards the end of September or up to middle of October. Rain at this time not only contributes materially to an increased outturn of the rice crop, but also provides the moisture necessary for starting the spring or *rabi* crops.

Manufactures.

Opium was formerly, with indigo, the chief manufactured product of Bihar, but in consequence of the agreement with the Chinese Government the Patna Factory has been closed. At Monghyr the Peninsular Tobacco Company have erected one of the largest cigarette factories in the world and as a result tobacco is being grown much more extensively. The Tata Iron and Steel Works at Jamshedpur in Singhbhum district are also one of the largest

* The figures given in this paragraph relate to British territory only.

in the world and numerous subsidiary industries are springing up in their vicinity. The most important of these are the Tinplate Company of India, Agricultural Implements, Ltd., Enfield Cable Company of India, Enamelled Ironware, Limited, and Indian Steel Wire Products. The population of Jamshedpur is rapidly approaching 100,000 and it consumes 1½ million tons of coal annually. This part of the province has also some of the richest and most extensive iron mines in the world and supplies the iron and steel works in both Bengal and Bihar and Orissa with raw materials, but the raising of coal is still the most important of the mineral industries in the province. The coalfields in the Manbhum District have undergone an extraordinary development in the past twenty years, while valuable new fields are being developed at Ramgarh, Bokaro and Karanpura in Hazaribagh. This same district is the most important mica mining centre in the world both on account of the quality as well as the size of its output. Manbhum, Palaman, Ranchi, the Santal Parganas and Gaya are also the chief centres for the production of lac and the manufacture of shellac the latter of which is exported from India to the value of ten crores annually.

Administration.

The Province on first constitution was administered by a Lieutenant-Governor-in-Council, thus being unique in India as the only Lieutenant Governorship with a Council. Under the Reform Act of 1919 it was raised to the status of a Governorship, with an Executive Council and Ministers. The principles of the provincial administration are fully explained in the section. The Provincial Governorships, where the division of the administration into Reserved Subjects, in charge of the Governor and his Executive Council, and Transferred Subjects, in charge of the Governor and Ministers chosen from the Legislative Council, is set out in detail. In all these respects Bihar and Orissa is on the same plane as the other Provinces in India.

Public Works.

The Public Works Department in the Province of Bihar and Orissa consists of two separate branches, *viz.*:—(1) the Buildings and Roads and (2) Irrigation which also deals with railways. Each has a Chief Engineer, who is also Secretary to the Local Government with an Engineer Officer as Under-Secretary in the Buildings and Roads branch and a non-professional Assistant Secretary, in the Irrigation branch under him. The Electrical work of the Province is carried out by an Electric Inspector and an Electrical Engineer and a staff of subordinates.

Justice.

The administration of justice is controlled by the High Court of Judicature at Patna. In the administration of civil justice below the High Court are the District Judges as Courts of Appeal, the Subordinate Judges and the Munsiffs. The jurisdiction of a District Judge or Subordinate Judge extends to all original suits cognizable by the Civil Courts. It does not, however, include the powers of a Small Cause Court, unless these be specially conferred. The ordinary jurisdiction of a Munsif extends to all suits in which the amount or value of the subject matter in dispute does not exceed Rs. 1,000 though the limit may be extended to Rs. 4,000. On the criminal side the Sessions Judge hears appeals from Magistrates exercising first class powers while the District Magistrate is the appellate authority for Magistrates exercising second and third class powers. The District Magistrate can also be, though in point of fact he very rarely is, a court of first instance. It is usual in most districts for a Joint Magistrate or a Deputy Magistrate to receive complaints and police reports, cases of difficulty or importance being referred to the District Magistrate who is responsible for the peace of the district. In the non-regulation districts the Deputy Commissioner and his subordinates exercise civil powers and hear rent suits.

Land Tenures.

Estates in the Province of Bihar and Orissa are of three kinds, namely, those permanently settled from 1793 which are to be found in the Patna, Tirhut and Bhagalpur divisions, those temporarily settled as in Chota Nagpur and parts of Orissa, and estates held direct by Government as proprietor or managed by the Court of Wards. The passing of the Bengal Tenancy Act (VIII of 1885) safeguarded the rights of the cultivators under the Permanent Settlement Act. Further, the Settlement Department under the supervision of the Director of Land Records makes periodical survey and settlement operations in the various districts both permanently and temporarily settled. In the former, the rights of the undertenants are recorded and attested, while in the latter there is the re-settlement of rents. In the re-settlement proceedings, rents are fixed not only for the landlords but also for all the tenants. A settlement can be ordered by Government on application made by landlords or tenants.

The tenures of Orissa are somewhat different. Under the zamindars, that is, the proprietors who took settlement from Government and pay revenue to Government direct, is a class of subordinate proprietors or proprietary tenure holders, who were originally village headmen dealing more or less direct with the revenue authorities. They have a variety of names, such as *mukadam*, *padhan*, *maurusi*, *sarbarakar*, *pursethi*, *khariddar* and *shikmi* zamindar. These sub-proprietors or proprietary tenure holders pay their revenue through the zamindars of the estates within which their lands lie. In Chota Nagpur and the Santal Parganas, the rights of village headmen have been recognised. The headman collects the rents and is responsible for them minus a deduction as remuneration for his trouble.

Both Orissa and Chota Nagpur have their own Tenancy Acts.

Police.

The Departments of Police, Prisons and Registration are each under the general direction of Government, supervised and inspected by an Inspector-General with a staff of assistants. The Commissioner of Excise and Salt is also Inspector-General of Registration.

Under the Inspector-General of Police are four Deputy Inspectors-General and 29 Superintendents. There are also 28 Assistant Superintendents of Police and 28 Deputy Superintendents. The force is divided into the District Police, the Railway Police and the Military Police. A Criminal Investigation Department has also been formed for the collection and

distribution of information relating to professional criminals and criminal tribes whose operations extend beyond a single district and to control, advise, and assist in investigations of crime of this class and other serious action which its assistance may be invoked. There are three companies of unmounted Military Police and one company of Mounted Military Police which are maintained as reserves to deal with serious and organised disturbances and perform no ordinary civil duties.

Education.

The position of education in the Province with the numbers attending schools, is set out in the section Education and the tables attached thereto (*q. v.*) showing in great detail the educational status of the administration.

There is a University at Patna, whose functions are described under the Indian Universities. (*q. v.*)

Medical.

The Medical Department is under the control of the Inspector-General of Civil Hospitals who is a Member of the Indian Medical Service. Under him there are 21 Civil Surgeons who are responsible for the medical work of the districts at the headquarters of which they are stationed. 60 Dispensaries are maintained by Government in addition to 601 Dispensaries maintained by Local bodies, Railways, private persons, etc. 6,042,169 patients including 55,871 in-patients were treated in all the dispensaries in 1927. The total income of the dispensaries maintained by Government and Local Bodies including that of the private aided institutions amounted to Rs. 37,64,884.

A large mental hospital for Europeans has been opened at Ranchi which receives patients from Northern India. A similar institution for Indians has been opened at Ranchi since September 1925 for the treatment of patients from Bihar and Orissa and Bengal. An institute for radium treatment has also been established at Patna.

A medical college has been opened at Patna and the Medical School which was in existence at Patna has been transferred to Darbhanga.

THE FINANCES OF BIHAR AND ORISSA.

As Bihar now enjoys practical financial autonomy, the finances are set out in greater detail.

(In thousands of Rupees).

Revenues and Receipts.	*Budget Estimate.* 1928-29.
II.—Taxes on Income	3,34
V.—Land Revenue	1,71,98
VI.—Excise	1,95,50
VII.—Stamps	1,09,25
VIII.—Forest	10,39
IX.—Registration	17,00
Irrigation—	
XIII.—Irrigation, Navigation, Embankment and Drainage Works for which capital accounts are kept	19,69
XIV.—Irrigation, Navigation, Embankment and Drainage Works for which no capital accounts are kept	1,05
XVI.—Interest	6,47
XVII.—Administration of Justice	5,14
XVIII.—Jails and Convict Settlements	6,93
XIX.—Police	1,72
XX.—Ports and Pilotage	..
XXI.—Education	6,47
XXII.—Medical	1,87
XXIII.—Public Health	79
XXIV.—Agriculture	2,72
XXV.—Industries	2,42
XXVI.—Miscellaneous Department	2
XXX.—Civil Works	5,30
XXXIII.—Receipts in aid of Superannuation	1,16
XXXIV.—Stationery and Printing	1,00
XXXV.—Miscellaneous	4,13
XXXIXA.—Miscellaneous adjustments between the Central and Provincial Governments	..
TOTAL REVENUE	5,74,37
Loans and Advances by the Provincial Government	8,56
Advances from the Provincial Loans Fund	....
Famine Insurance Fund	12,57
Suspense	2,75
TOTAL RECEIPTS	5,98,25
Opening Balance	(*a*) 1,65,51
GRAND TOTAL	7,63,76

(*a*) Ordinary balance	96,11
Famine Insurance Fund	69,40
Total	1,65,51

(In thousands of Rupees.)

Expenditure.	*Budget Estimate.* 1928-29.
5.—Land Revenue ..	28,28
6.—Excise ..	18,50
7.—Stamps..	3,12
8.—Forests ..	7,93
8A.—Forest Capital outlay charged to Revenue ..	1,36
9.—Registration ..	6,48
Irrigation—	
14.—Interest on Irrigation Works for which capital accounts are kept ..	20,45
15.—Irrigation Revenue Account—Other Revenue Expenditure Financed from ordinary Revenue ..	4,80
15 (1)—Other Revenue expenditure financed from Famine Insurance Grants ..	..
16.—Irrigation Capital Account—Construction of Irrigation, Embankment and Drainage Works ..	5
19.—Interest on Ordinary Debt ..	1,33
22.—General Administration ..	72,37
24.—Administration of Justice ..	39,33
25.—Jails and Convict Settlements ..	21,35
26.—Police ..	84,44
27.—Ports and Pilotage ..	1
30.—Scientific Departments ..	45
31.—Education ..	87,60
32.—Medical ..	29,71
33.—Public Health ..	15,56
34.—Agriculture ..	15,03
35.—Industries ..	10,50
37.—Miscellaneous Departments ..	38
41.—Civil Works ..	79,47
43.—Famine Relief and Insurance ..	1,00
45.—Superannuation Allowances and Pensions ..	24,77
45A.—Commutation of Pensions..	55
46.—Stationery and Printing ..	8,83
47.—Miscellaneous ..	4,30
51.—Contribution to the Central Government by Provincial Government ..	....
51A.—Miscellaneous adjustments between the Central and Provincial Governments.	....
Total expenditure charged to Revenue ..	5,87,96
60B. Commuted value of pension ..	—12
Loans and Advances by the Provincial Government ..	5,17
Advances from the Provincial Loans Fund ..	7,64
Famine Insurance Fund ..	5,98
Suspense..	2,75
Total expenditure not charged to revenue ..	21,42
Reserve for unforeseen ..	3,00
Total expenditure ..	6,12,38
Closing balance ..	(b) 1,51,38
GRAND TOTAL ..	7,63,76
Provincial Surplus ..	....
Provincial Deficit ..	14,13

(b) Ordinary balance ..	75,39
Famine Insurance Fund ..	75,99
Total ..	1,51,38

Administration.

GOVERNOR.

His Excellency Sir Hugh Lansdown Stephenson, K.C.S.I., K.C.I.E., I.C.S.

PERSONAL STAFF.

Private Secretary, Lieutenant E. J. Montgomery.
Aides-de-Camp, Capt. I. F. Hossack and Lieut. H. S. Ford.
Honorary Aides-de-Camp, Lieut.-Colonel Cecil George Lees. Major F. C. Temple and Muhammad Reza, Khan Bahadur, Risaldar Major and Hony. Lieutenant.

EXECUTIVE COUNCIL.

The Hon. Maharaja Bahadur Keshav Pershad Singh.

The Hon. Mr. James David Sifton, C.I.E., I.C.S.

Ministers.

The Hon. Sir Saiyid Mahamed Fakhr-ud-din Khan Bahadur, Kt., (*Education*).

The Hon. Sir Ganesh Datta Singh, Kt. (*Local-Self Government*).

SECRETARIAT.

Chief Secretary to Government, Political and Appointment Departments, H. K. Briscoe, I.C.S.

Secretary to Government, Finance Department, P. C. Tallents, I.C.S.

Secretary to Government, Revenue Department, R. E. Russell, I.C.S.

Secretary to Government (P. W. D.), Irrigation Branch, E. L. Glass.

Buildings and Roads Branch, T. G. Powell.

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction, G. E. Fawcus, M.A.
Inspector-General of Police, Walter Swain, C.I.E.

Conservator of Forests, Alexander James Gibson.

Inspector-General of Civil Hospitals, Col. W. S. Willmore, M.D., I.M.S.

Director of Public Health, Lt. Col. William Charles Ross, M.B., D.P.H.

Inspector-General of Prisons, Lt.-Col. I. M. Macrae, O.B.E., M.D., I.M.S.

Accountant-General, H. Bhima Sena Rau, B.A.

Director of Agriculture, A. C. Dobbs.

GOVERNORS OF BIHAR AND ORISSA.

Lord Sinha of Raipur, P.C., K.C.	1920
Sir Henry Wheeler	1921
Sir Hugh Lansdown Stephenson, K.C.S.I, K.C.I.E. ..	1927

Bihar and Orissa Legislative Council.

The Hon'ble Khan Bahadur Khwaja Muhammad Nur (President.)
Mr. B. Lakshmidhar Mahanti (Deputy President).
,, J. A. Samuel, Bar-at-Law (Secretary.)

Members.

NOMINATED.

Officials.

Mr. William Bessil Heycock, I.C.S.
,, Hugh Kynaston Briscoe, I.C.S.
,, Philip Cubitt Tallents, I.C.S.
,, Godfrey Elwin Owen, I.C.S.
,, Eric Cecil Ansorage, I.C.S.
,, Robert Edwin Russell, I.C.S.
,, Arthur Edgar Scroppe, I.C.S.
,, Walter, Swain, C.I.E.
,, Henry Lambert, I.E.S.
Col. William Southwick Willmore, I.C.S.
Mr. Patrick William Murphy, I.C.S., (Addl.)
,, Ernest Leslie Glass.
,, John Padger.

Non-Officials.

Raja Devaki Nandan Prashad Singh.
Rai Bahadur Sri Krishna Mahapatra.
KhanBahadur Shah Muhammad Zahya.
Rai Bahadur Kalipada Sarkar (Domiciled Bengali Community.
Mr. A. E. D'Silva (Anglo-Indian Community.)
Rev. Brajananda Das (Depressed Classes.)
Pritam Luther Singh.
Rev. Thomas Lenman.
Rai Bahadur Bansidhar Dhandania.
Babu Harendra Nath Banerji (Labouring Classes.)
Emanuel Sukh.
Mr. S. S. Day (Indian Christian Community.)

ELECTED.

Name.	Constituencies.
The Hon'ble Sir Saiyid Muhammad Fakhr-ud-din, Kt., Khan Bahadur (Minister.)	West Patna Muhammadan Rural.
The Hon'ble Babu Ganesh Datta Singh (Minister.)	East Gaya Non-Muhammadan Rural.
Babu Jagat Narayan Lal	Patna Division Non-Muhammadan Urban.
Mr. Saiyid Abdul Aziz	Patna Division Muhammadan Urban.
Raja Bahadur Harihar Prasad Narayan Singh ..	Patna Division Landholders.
Rai Brij Raj Krishna	Patna Non-Muhammadan Urban.
Babu Rajandhari Sinha	West Patna Non-Muhammadan Rural.

Name.	Constituencies.
Babu Gur Sahay Lal	East Patna Non-Muhammadan Rural.
Maulavi Saiyid Muhammad Husain	East Patna Muhammadan Rural.
Mr. Rajkishore Lal Nandkeolyar	West Gaya Non-Muhammadan Rural.
Babu Bhagwati Saran Singh	Central Gaya Non-Muhammadan Rural.
Maulavi Ahmad Husain Kazi	Gaya Muhammadan Rural.
Babu Sidheshvari Prashad	Arrah Non-Muhammadan Rural.
Pandit Dudhnath Pande	Central Shahabad Non-Muhammadan Rural.
Babu Rajivaranjan Prashad Sinha	South Shahabad Non-Muhammadan Rural.
Mr. Saiyid Athar Husain	Shahabad Muhammadan Rural.
Babu Keshari Prasad Singh	Tirhut Division Non-Muhammadan Urban.
Maulavi Abdul Ghani	Tirhut Division Muhammadan Urban.
Babu Chandreshvar Prashad Narayan Sinha ..	Tirhut Division Landholders.
Babu Shrinandan Prashad Narayan Singh Sharma	North Saran Non-Muhammadan Rural.
Babu Nirsu Narayan Singh	South Saran Non-Muhammadan Rural.
Maulavi Saiyid Mubarak Ali Sahib	Saran Muhammadan Rural.
Babu Harbans Sahay	North Champaran Non-Muhammadan Rural.
Babu Rameshvar Prashad Dutt	South Champaran Non-Muhammadan Rural.
Khan Bahadur Muhammad Khan	Champaran Muhammadan Rural.
Thakur Ramnandan Sinha	North Muzaffarpur Non-Muhammadan Rural.
Babu Ramdayalu Sinha	East Muzaffarpur Non-Muhammadan Rural.
Mahanth Badri Narayan Das	West Muzaffarpur Non-Muhammadan Rural.
Babu Dip Narayan Sinha	Hajipur Non-Muhammadan Rural.
Maulavi Muhammad Ishaque	Muzaffarpur Muhammadan Rural.
Mahanth Ishvar Gir	North-West Darbhanga Non-Muhammadan Rural.
Babu Shiva Shankar Jha	North-East Darbhanga Non-Muhammadan Rural.
Babu Girindra Mohan Misra	South-East Darbhanga Non-Muhammadan Rural.
Babu Satya Narayan Singh	Samastipur Non-Muhmamadan Rural.
Maulavi Abdul Hamid Khan	Darbhanga Muhammadan Rural.
Babu Rameshvar Narayan Agrawal	Bhagalpur Division Non-Muhammadan Urban.
Khan Bahadur Abdul Wahab Khan	Bhagalpur Division Muhammadan Urban.
Rai Bahadur Dalip Narayan Singh	Bhagalpur Division Landholders.
Babu Rajendra Misra	North-Bhagalpur Non-Muhammadan Rural.

Name.	Constituencies.
Rai Bahadur Lakshmi Narayan Sinha	Central Bhagalpur, Non-Muhammadan Rural.
Babu Kailash Bihari Lal	South Bhagalpur Non-Muhammadan Rural.
Khan Bahadur Saiyid Muhammad Naim ..	Bhagalpur Muhammadan Rural.
Babu Sri Krishna Sinha	East Monghyr Non-Muhammadan Rural.
Babu Ram Charitra Singh	North-West Monghyr Non-Muhammadan Rural.
Babu Kalika Prasad Singh	South-West Monghyr Non-Muhammadan Rural.
Chaudhuri Muhammad Nazirul Hasan	Monghyr Muhammadan Rural.
Rai Bahadur Prithwi Chand Lal Chowdry ..	Purnea Non-Muhammadan Rural.
Mr. Saiyid Moin-ud-din Mirza	Kishanganj Muhammadan Rural.
Maulvi Haji Muhammad Bux Chaudhuri ..	Purnea Muhammadan Rural.
Babu Pratapendra Chandra Pande	Santal Parganas (North) Non-Muhammadan Rural.
Babu Rameshvar Lal Marwari	Santal Parganas (South) Non-Muhammadan Rural.
Maulavi Abdul Bari	Santal Parganas Muhammadan Rural.
Rai Sahib Loknath Misra	Orissa Division Non-Muhammadan Urban.
Maulavi Saiyid Muhammad Nurul Huda ..	Orissa Division Muhammadan Rural.
Raja Rajendra Narayan Bhanja Deo, O.B.E. ..	Orissa Division Landholders.
Babu Narayan Birabar Samant	North Cuttack Non-Muhammadan Rural.
Babu Lakshmidhar Mahanti	South Cuttack Non-Muhammadan Rural.
Babu Nandkishore Das	North Balasore Non-Muhammadan Rural.
Chaudhuri Bhagwat Prashad Samantarai Mahapatra.	South Balasore Non-Muhammadan Rural.
Babu Godavaris Misra	North Puri Non-Muhammadan Rural.
Babu Lingaraj Misra	South Puri Non-Muhammadan Rural.
Babu Brajamohan Pande	Sambalpur Non-Muhammadan Rural.
Mr. Jimut Bahan Sen	Chota Nagpur Division Non-Muhammadan Urban.
Khan Bahadur Khwaja Muhammad Nur ..	Chota Nagpur Division Muhammadan Rura.
Bhaiya Rajkishore Deo	Chota Nagpur Division Landholders.
Rai Bahadur Sarat Chandra Ray	Ranchi Non-Muhammadan Rural.
Babu Krishna Ballabh Sahay	Hazaribagh Non-Muhammadan Rural
Babu Devaki Prasad Sinha	Palaman Non-Mahomedan Rural.
Babu Gunendra Nath Ray	North Manbhum Non-Muhammadan Rural.
Babu Nilkantha Chatterji	South Manbhum Non-Muhammadan Rural.
Babu Devendra Nath Samanta	Singhbhum Non-Muhammadan Rural.
Babu Baldeva Sahay	Patna University.
Mr. J. B. Norman	European Constituency.
Mr. E. J. Finch	Bihar Planters' Constituency.
Mr. E. S. Tarlton	Indian Mining Association.
Mr. Amritlal Ojha	Indian Mining Federation.

The Central Provinces and Berar

The Central Provinces and Berar compose a great triangle of country midway between Bombay and Bengal. Their area is 131,052 sq. miles, of which 82,109 are British territory proper, 17,767 (*viz.*, Berar) held on perpetual lease from the Nizam and the remainder held by Feudatory Chiefs. The population (1921) is 13,912,760 under British administration, including 3,075,316 in Berar. Various parts of the Central Provinces passed under British control at different times in the wars and tumult in the first half of the 19th century and the several parts were amalgamated after the Mutiny, in 1861, into the Chief Commissionership of the Central Provinces. Berar was, in 1853, assigned to the East India Company as part of a financial arrangement with the Nizam for the maintenance of the Hyderabad contingent, and was leased in perpetuity to the Central Provinces in 1903, as the result of a fresh agreement with the Nizam.

The Country.

The Central Provinces may roughly be divided into three tracts of upland, with two intervening ones of plain country. In the north-west, the Vindhyan plateau is broken country, covered with poor and stunted forest. Below its precipitous southern slopes stretches the rich wheat growing country of the Nerbudda valley. Then comes the high Satpura plateau, characterised by forest-covered hills and deep water-cut ravines. Its hills decline into the Nagpur plain, whose broad stretches of "deep" black cotton soil make it one of the more important cotton tracts of India and the wealthiest part of the C. P. proper. The Eastern half of the plain lies in the valley of the Wainganga and is mainly a rice growing country. Its numerous irrigation tanks have given it the name of the "lake country" of Nagpur. Further east is the far-reaching rice country of Chattisgarh, in the Mahanadi basin. The south-east of the C. P. is again mountainous, containing 24,000 square miles of forest and precipitous ravines, and mostly inhabited by jungle tribes. The Feudatory States of Bastar and Kankar lie in this region. Berar lies to the south-west of the C. P. and its chief characteristic is its rich black cotton-soil plains.

The People.

The population of the province is a comparatively new community. Before the advent of the Aryans, the whole of it was peopled by the Gonds and other primitive tribes and these aboriginal inhabitants fared better from the Aryans than their like in most parts of India because of the rugged nature of their home. But successive waves of immigration flowed into the province from all sides. The early inhabitants were driven into the inaccessible forests and hills, where they form nearly a quarter of the whole population of the C. P. being found in large numbers in all parts of the province, particularly in the south-east. The main divisions of the new comers are indicated by the language divisions of the province. Hindi, brought in by the Hindustani-speaking peoples of the North, prevails in the North and East. Marathi in Berar and the west and centre of the C. P. Hindi is spoken by 56 per cent. of the population and is the *lingua franca*. Marathi by 31 per cent. and Gondi by 7 per cent. The effects of invasion are curiously illustrated in Berar, where numbers of Moslems have Hindu names, being descendants of former Hindu officials who on the Mahomedan invasion adopted Islam rather than lose their positions. The last census shows that a gradual Brahmanising of the aboriginal tribes is going on. The tribes are not regarded as impure by the Hindus and the process of absorption is more or less civilising.

Industries.

When Sir Richard Temple became first Chief Commissioner of the C. P. the province was landlocked. The only road was that leading in from Jubbulpore to Nagpur. The British administration has made roads in all directions, the two trunk railways between Bombay and Calcutta run across the province and in the last few years a great impetus has been given to the construction of subsidiary lines. These developments have caused a steady growth of trade and have aroused vigorous progress in every department of life. The prime industry is, of course, agriculture, which is assisted by one of the most admirable agricultural departments in India and is now receiving additional strength by a phenomenal growth of the co-operative credit movement. The land tenure is chiefly on the zemindari, or great landlord system, ranging with numerous variations, from the great Feudatory chief ships, which are on this basis, to holdings of small dimensions. A system of land legislation has gradually been built up to protect the individual cultivator. Berar is settled on the Bombay raiyatwari system. 19,657 square miles of the C. P. is Government Reserved forest; in Berar the forest area is about 3,319 square miles, the total forest area being one-sixth of the whole Province. The rugged nature of the greater part of the country makes forest conservation difficult and costly. Excluding forest and waste 66 per cent. of the total land is occupied for cultivation; in the most advanced districts the proportion is 80 per cent. and in Berar the figure is also high. The cultivated area is extending continuously except for the temporary checks caused by bad seasons. Rice is the most important crop of the C. P. Wheat comes next, with 19 per cent., then pulses and other cereals used for food and oil-seeds. with 51 per cent. and cotton with 9 per cent. In Berar cotton occupies 48 per cent. of the cropped area, jowar covers 33 per cent. then wheat and oil seeds. In agriculture more than half the working population is female.

Commerce and Manufactures.

Industrial life is only in its earliest development except in one or two centres, where the introduction of modern enterprise along the railway routes has laid the foundations for great future developments of the natural wealth of the province. Nagpur is the chief centre of a busy cotton spinning and weaving industry. The Empress Mills, owned by Parsi manufacturers, were opened there in 1877 and the general prosperity of the cotton trade has led to the addition of many mills here and in other parts of the province. The total amount of spun yarn exported from the Province during the year ending 31st March 1927 was about 115,90 maunds, valued at Rs. 34,77,210.

The largest numbers engaged in any of the modern Industrial concerns are employed in manganese mining which in 1926 employed 31,057 persons and raised 756,148 tons. Then follow coal mining with an output of 635,174 tons and 8,321 persons employed, the Jubbulpore marble quarries and allied works, the limestone quarries and the mines for pottery clay, soapstone, etc.

The total number of factories of all kinds legally so described was 800 in 1927. the latest period for which returns are available and the number of people employed in them 68,603. The same economic influences which are operative in every progressive country during its transition stage are at work in the C. P. and Berar, gradually sapping the strength of the old village industries, as communications improve, and concentrating industries in the towns. While the village industries are fading away, a large development of trade has taken place. The last pre-war reports showed an increase in volume by one-third in eight years.

Administration.

The administration of the Central Provinces and Berar is conducted by a Governor-in-Council, who is appointed by the Crown. He is assisted by eight Secretaries and six under-secretaries. Under the reform scheme the administration is conducted by a Governor with an Executive Council of two members, one of whom is a non-official and two Ministers, the latter being in charge of the transferred subjects.

The local legislature consists of 73 members distributed as follows:—38 elected from the C.P.; 17 elected from Berar; 2 members of the Executive Council; 8 nominated non-officials; 8 nominated officials. The Governor (who is not a member of the Council) has the right of nominating two additional members with special knowledge on any subject regarding which legislation is before the Chamber. The C. P. are divided for administrative purposes nto four divisions and Berar constitutes another division. Each of these is controlled by a Commissioner. The divisions are sub-divided into districts, each of which is controlled by a Deputy Commissioner, immediately subordinate to the Commissioner. The principal heads of Provincial departments are the Commissioner of Settlements and Director of Land Records, Registrar-General of Births, Deaths and Marriages and Inspector-General of Registration, the Chief Conservator of Forests, the Inspector-General of Civil Hospitals, the Director of Public Health, the Inspector General of Police, the Inspector-General of Prisons, the Director of Public Instruction, the Excise Commissioner, the Director of Agriculture, the Registrar of Co-operative Societies, the Director of Industries, the Legal Remembrancer and the two Chief Engineers, Public Works Department, Buildings and Roads and Irrigation Branches. The Deputy Commissioners of districts are the chief revenue authorities and District Magistrates and they exercise the usual powers and functions of a district officer. The district forests are managed by a forest officer, over whom the Deputy Commissioner has certain powers of supervision, particularly in matters affecting the welfare of the people. Each district has a Civil Surgeon, who is generally also Superintendent of the District Jail and whose work is also in various respects supervised by the Deputy Commissioner. The Deputy Commissioner is also Marriage Registrar and manages the estates of his district which are under the Court of Wards. In his revenue and criminal work the Deputy Commissioner is assisted by (a) one or more Assistant Commissioners, or members of the Indian Civil Service; (b) one or more Extra Assistant Commissioners, or members of the Provincial Civil Service, usually natives of India, but including a few Europeans and Anglo-Indians and (c) by Tahsildars and Naib Tahsildars, or members of the Subordinate service, who are nearly always natives of India. The district is divided for administrative purposes into tahsils, the average area of which is 1,500 square miles. In each village a lambardar or representative of the proprietary body, is executive headman.

Justice.

The Court of the Judicial Commissioner is the highest court of appeal in civil cases, and also the highest court of criminal appeal and revision for the Central Provinces and Berar including proceedings against European British subjects and persons jointly charged with European British subjects.

The Court sits at Nagpur and consists of a Judicial Commissioner and 4 Additional Judicial Commissioners of whom one at least must be an advocate of the Court or a Barrister or pleader of not less than 10 years' standing.

Subordinate to the Judicial Commissioner's Court are the District and Sessions Judges (11 in number) each of whom exercises civil and criminal jurisdiction in a Civil and Sessions district comprising one or more Revenue districts. The civil staff below the District and Sessions Judge consists of Sub-Judges of the 1st and 2nd class.

Local Self-Government.

Municipal administration was first introduced under the Punjab Municipal Acts and the Municipality of Nagpur dates from 1864. Several revising Acts extend its scope and the C. P. Municipalities Act passed towards the end of the year 1922 has considerably increased the power of the Municipal Committees. The C. P. Municipalities Act has also been extended to Berar. Viewed generally, municipal self-government is considered to have taken root successfully. The general basis of the scheme is the Local Board for each tahsil and the District Council for each district. The larger towns have municipalities, there being 65 such bodies in the Province.

Under the Central Provinces Local Self-Government Act passed in 1920 the Local Boards consist of elected representatives of circles and nominated members other than Government officials not exceeding in number one-fourth of the Board, and the constitution of the District Council is a certain proportion of elected representatives of Local Boards, of members selected by those representatives and of members, other than Government servants, nominated by Government.

The District Councils in the Central Provinces have power of taxation within certain

limits and Local Boards derive their funds in allotments from the District Councils. The new Central Provinces Local Self-Government Act has also been applied to Berar. The Office Bearers of the District Councils and Local Boards are with few exceptions non-officials.

Rural education and sanitation are among the primary objects to which these bodies direct their attention, while expenditure on famine relief is also a legitimate charge upon the District Council funds.

The Central Provinces Village Panchayat Act was passed in the year 1920. So far 165 Panchayats have been established. As the result of a recommendation of a Committee appointed in 1925 to look into the question of Panchayats, a Village Panchayat Officer has been appointed to guide the development of the Panchayat system.

Public Works.

The Public Works Department is controlled by two Chief Engineers, who are also Secretaries to the Government. There are three Superintending Engineers for Roads and Buildings and three for Irrigation. The Province is well covered by a network of roads, some of which have been constructed as famine relief works. In most cases these roads are not fully bridged and are, therefore, impassable to traffic at times during the rains. During recent years Government has adopted the policy of transfer of State roads and buildings to District Councils for maintenance and a number of roads and buildings have been handed over to these Bodies, in pursuance of this policy.

State Irrigation was introduced early in the present century mainly as a result of the recommendations of the Irrigation Commission (1901-03). The Irrigation Branch of the department was separated from the Roads and Buildings Branch in 1920. During the last twenty years a sum of about Rs. 6 crores has been expended on the construction of irrigation works, of which the more important are the Wainganga, Tandula, Mahanadi, Kharung and Maniari projects. Three works, *viz.*, the Mahanadi and Wainganga Canals and the Asola Mendha tank, were originally sanctioned as productive works and the remainder were all sanctioned as unproductive works. The three works sanctioned as productive have all failed to justify their classification in this category and have now been transferred to the unproductive list. The conditions in the province are such that irrigation works cannot be expected to be productive and their construction is justified only on account of their value as a protection against famine. The normal area of annual irrigation is at present about 400,000 acres, and the income from these works is approximately equal to the expenditure incurred on their maintenance and management.

Police.

The police force was constituted on its present basis on the formation of the Province, the whole of which including the Cantonments and the Municipalities, is under one force. The strength is equal to one man per 9 square miles of area. The superior officers comprise an Inspector-General, whose jurisdiction extends over Berar, three Deputy Inspectors-General, for assistance in the administrative control and supervision of the Police force, including the Criminal Investigation Department, and the usual cadre of District Superintendents of Police, Assistant and Deputy Superintendents and subordinate officers. On railways special Railway Police are employed under the control of two Superintendents of Railway Police with headquarters at Raipur and Hoshangabad. A Special Armed Force of 735 men is distributed over the headquarters of eight districts, for use in dealing with armed disturbers of the peace in whatever quarter they may appear. There is a small force of Mounted Police. The Central Provinces has no rural police as the term is understood in other parts of India. The village watchman is the subordinate of the village headman and not a police official and it is considered very desirable to maintain his position in this respect.

Education.

The Education Department of the Central Provinces and Berar is administered by a Director of Public Instruction, a Deputy Director, five Inspectors and two Inspectresses who in their turn are assisted by eight Assistant Inspectors and four Assistant Inspectresses. An Agency Inspector supervises the schools in the Feudatory States. Schools are divided into schools for general education and schools for special education. The latter are schools in which instruction is given in a special branch of technical or professional education. The main divisions of schools for general education is into Primary and Secondary. In the Primary Schools the teaching is conducted wholly in the vernacular and these schools are known as Vernacular Schools. The Secondary Schools are divided into Middle and High Schools. The former may be either Vernacular Middle Schools in which instruction is given wholly in the Vernacular, or Anglo-Vernacular Middle Schools in which instruction is given both in English and the Vernacular. In the High School classes instruction until recently was given in English but the vernacular was adopted as the medium of instruction at the beginning of the school year 1922-23. For the convenience of pupils whose mother tongue is not a recognised vernacular of the locality a few English medium classes are still maintained. For administrative purposes schools are further divided according to their management into schools under public management and schools controlled by private bodies. The former consist of (a) schools controlled by Government and (b) schools controlled by Local Bodies or Boards. The latter consist of (a) Schools which are aided by grant from Government or from Local and Municipal Funds and (b) unaided schools. All schools under public management and all aided schools conform in their courses of study to the standards prescribed by the Education Department or by the High School Education Board. They are subject to inspection by the Department and to the general rules governing schools of this type. They are "recognised" by the Department and their pupils may appear as candidates for any prescribed examination for which they are otherwise eligible. Unaided schools do not follow the rules of the Department, nor are they subject to inspection by the Department. They are mostly indigenous schools which have been too recently opened

to have acquired "recognition." Their pupils may not appear as candidates at any of the prescribed examinations without the previous sanction of the Department.

As an experimental measure the inspection and administration of Board Vernacular schools have been transferred to the District Councils at Bhandara, Balaghat, Amraoti and Hoshangabad.

The Primary Education Bill which was passed by the Local Legislative Council in March 1920 marks an important stage by giving Local Bodies power to introduce compulsory education in the areas under their jurisdictions.

Higher education is at present given in five colleges. In Nagpur Morris College teaches up to the M.A. standard in Arts. Hislop College is affiliated up to the M.A. standard in Arts. The Victoria College of Science teaches up to the M.Sc. standard in Science. Up to the B.Sc. standard it works in conjunction with Morris College and Hislop College. In Jubbulpore Robertson College teaches up to the B.A. and B.Sc. standards. The King Edward College teaches up to the B.A. degree in Arts and the Intermediate degree in Science. The province contains also a Teachers' Training College at Jubbulpore and Normal Schools at different centres, and an Engineering School at Nagpur. There is a Technical Institute at Amraoti, which is controlled by the Department of Industries. There is also an Agricultural College at Nagpur under the Department of Agriculture.

Collegiate Education is under the control of the University of Nagpur to which the colleges of the province are affiliated. The University was established by the Nagpur University Act of 1923. A University Law College has been established at Nagpur with effect from the 1st July 1925.

As a corollary to the Central Provinces University Act the Central Provinces High School Education Bill was passed in 1923 on the lines of the United Provinces Intermediate and High School Education Act. Its aim is to free the High Schools of the Province from the control of the University and from this point of view to substitute for the University a Board of Secondary Education for the regulation and control of Secondary Education. In order, however, that the connection between Secondary and University Education may still be maintained the Bill provides that one-third of the members of the Board will be drawn from men experienced in university affairs and that of this one-third not less than two-thirds shall be teachers in the University or in colleges affiliated thereto. At the same time teachers engaged in school work are also represented on the Board.

Medical.

The medical and sanitary services of the province are respectively controlled by an Inspector-General of Civil Hospitals and a Director of Public Health. The medical department has made much progress since the year 1911. A striking advance has been made in recent years with urban sanitation, and the opening of a Medical School at Nagpur. The principal medical institutions are the Mayo Hospital at Nagpur, opened in 1874, with accommodation for 218 in-patients; the Victoria Hospital at Jubbulpore, opened in 1886, and accommodation for 99 in-patients, the Lady Dufferin Hospital and the Mure Memorial Hospital at Nagpur and the Lady Elgin Hospital and the Crump Children's Hospital at Jubbulpore, these last four being for women and children and containing together accommodation for 178 in-patients. Two important hospitals for women have been recently opened at Chhindwara and Khandwa, and at all district headquarters where no separate women's hospitals exist, sections of the Main Hospitals have been opened for the treatment of women by women. The Mayo Hospital, Nagpur, was provincialised in 1923, the Main Hospital at Amraoti in 1925, the Victoria Hospital at Jubbulpore in 1926, and the Main Hospital at Raipur in 1928. In accordance with recent policy, 118 out of 177 local fund dispensaries have been transferred to the administrative and executive control of local bodies. The Province has one Mental Hospital at Nagpur. Vaccination is compulsory in nearly allMunicipal towns to which the Vaccination Act has been extended. The Government in 1913, sanctioned the opening of peripatetic dispensaries in unhealthy areas. There are at present 39 such dispensaries. A school for training health workers has been started at Nagpur and 35 Infant Welfare Centres have been opened A start in the direction of opening a Health Institute has been made with the initiation of chemical and bacteriological works with a small staff in Nagpur.

Finances.

The budget presented this year was a progressive one. Its success was in no small measure due to the cautious and skilful handling of the provincial finances in the post-reform period by successive finance members. The willingness of the Council to submit to new taxation during the depressing days of 1923 was another factor that tended to maintain the equilibrium of the finances. The shadow of famine brooded over the northern districts in the provinces in the current year, but Government lost no time in extending relief on a lavish scale, with the result that the outlook is more hopeful.

FINANCES OF THE CENTRAL PROVINCES.

ESTIMATED REVENUE FOR 1928-29.

Principal Heads of Revenue.	Rs.
Taxes on Income	1,62,000
Land Revenue	2,38,20,000
Excise	1,30,07,000
Stamps	66,46,000
Forest	57,95,000
Registration	6,68,000
Total ..	5,00,98,000

	Rs.
Irrigation.	
Irrigation, Navigation Embankment and Drainage Works for which Capital Accounts are kept	—82,000
Irrigation, Navigation, Embankment and Drainage Works for which no Capital Accounts are kept	1,64,000
Total ..	82,000
Debt Services.	
Interest	2,92,000
Civil Administration.	
Administration of Justice	4,92,000
Jails and Convict Settlements	3,82,000
Police	2,05,000
Education	5,34,000
Medical	65,000
Public Health	61,000
Agriculture	3,66,000
Industries	44,000
Miscellaneous Departments	67,000
Total ..	22,16,000
Civil Works.	
Civil Works	5,10,000
Miscellaneous.	
Receipts in aid of Superannuation	1,28,000
Stationery and Printing	77,000
Miscellaneous	4,23,000
Transfers from Famine Insurance Fund	14,81,000
Total ..	21,09,000
Miscellaneous adjustments between the Central and Provincial Governments..	....
Extraordinary receipts	58,000
Total Provincial Revenue ..	5,53,65,000
Debt Heads.	
Deposits and Advances—Famine Insurance Fund	15,96,000
Appropriations for Reduction or Avoidance of Debt	4,05,000
Sinking Fund for loans granted to Local Bodies	400
Depreciation Fund for Government Press	35,000
Loans and Advances by Provincial Governments	7,45,600
Advances from Provincial Loans Fund and Government of India	31,56,000
Total Revenue and Receipts ..	6,13,03,000
Opening balance { Ordinary	47,30,000
Opening balance { Famine Insurance Fund ..	1,79,02,000
Grand Total ..	8,39,35,000

ESTIMATED EXPENDITURE FOR 1928-29.

Direct Demands on the Revenue.

	Rs.
Land Revenue	30,52,647
Excise	13,61,000
Stamps	1,69,000
Forest	42,47,899
Registration	2,25,000
Total	90,55,546

Irrigation.

	Rs.
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works—	
Interest on Works for which Capital Accounts are kept	26,87,000
Other Revenue expenditure financed from Ordinary Revenues	4,10,000
(1) Other Revenue expenditure financed from Famine Insurance Grants	....
Total	30,97,000
Capital Account of Irrigation, Navigation, Embankment and Drainage Works charged to Revenue.—	
Construction of Irrigation, Navigation, Embankment and Drainage Works.—	
A.—Financed from Famine Insurance Grants	1,45,000
B.—Financed from Ordinary Revenue	....
Total	1,45,000

Debt Services.

	Rs.
Interest on Ordinary Debt	—2,38,000
Reduction or Avoidance of Debt	4,05,000
Total	—1,67,000

Civil Administration.

	Rs.
General Administration Reserved	66,67,998
Do. Transferred	96,000
Administration of Justice	32,51,854
Jails and Convict Settlements	10,23,000
Police	60,55,999
Scientific Departments	28,000
Education—	
Reserved	1,55,000
Transferred	66,72,000
Medical	18,03,000
Public Health	6,94,000
Agriculture	19,10,000
Industries—	
Reserved	27,000
Transferred	2,91,000
Miscellaneous Departments—	
Reserved	1,31,000
Total	2,88,05,851

Civil Works	Rs.
Civil Works—	
Reserved	58,000
Transferred	1,05,62,000
Total ..	1,06,20,000
Miscellaneous.	
Famine Relief and Insurance.—	
A.—Famine Relief	62,00
B.—Transfers to Famine Insurance Fund	....
Superannuation Allowances and Pensions	15,95,000
Stationery and Printing—	
Reserved	6,23,000
Transferred	20,000
Miscellaneous—	
Reserved	93,000
Transferred	7,71,000
Total ..	31,64,000
Provincial Contributions and miscellaneous adjustments between Central and Provincial Governments.—	
Contributions	14,33,000
Miscellaneous Adjustments	....
Total ..	14,33,000
Extraordinary charges	....
Expenditure in England	17,20,000
Total Provincial Expenditure	5,82,07,397
Capital account of Irrigation, Navigation, Embankments, Drainage and other Works not charged to Revenue—	
Forest Capital outlay	80,000
Construction of Irrigation Works	22,56,000
Miscellaneous Capital outlay not charged to Revenue—	
Commuted Value of Pensions	8,00,000
Total ..	31,36,000
Debt Heads.	
Deposits and Advances—	
Famine Insurance Fund	23,31,000
Depreciation Fund for Government Press	20,000
Loans and Advances by Provincial Government	5,84,000
Advances from Provincial Loans Fund and Governments of India	9,87,000
Total Expenditure and Disbursements	6,52,65,397
Closing balance { Ordinary	15,02,603
Closing balance { Famine Insurance Fund ..	1,71,67,000
Grand Total	8,39,35,000
Deficit	—28,42,397

GOVERNOR.

His Excellency Sir Montagu Butler, Kt., K.C.S.I., C.B., C.I.E., C.V.O., C.B.E., I.C.S.

MEMBERS OF THE EXECUTIVE COUNCIL.

The Hon'ble Mr. Shripad Balwant Tambe, B.A., LL.B.

The Hon'ble Mr. Arthur Edward Nelson, M.A., (Oxon)., C.I.E., O.B.E., I.C.S.

MINISTERS.

The Hon'ble Mr. E. Raghavendra Rao, Barrister-at-Law.

The Hon'ble Mr. Tukaram Jairam Kedar, B.A., LL.B.

SECRETARIAT.

Chief Secretary, Hyde Clarendon Gowan, B.A., C.I.E., V.D., I.C.S.

Financial Secretary, Noel James Roughton, I.C.S.

Revenue Secretary, H. C. Greenfield.

Settlement Secretary, Charles Francis Waterfall, B.A., I.C.S.

Legal Secretary, Frederick Louis Grille, M.A., Barrister-at-Law, I.C.S.

Education Secretary, E. A. Macnee, I.E.S., B.SC.

Secretary, Public Works Department, (Buildings and Roads Branch), J. A. Baker, C.I.E.

Secretary, Public Works Department, (Irrigation Branch), Colonel H. de L. Pollard Lowsley, C.M.G., C.I.E., D.S.O., R.E.

Under Secretaries, Ratan Kumar Nehru, I.C.S., Benjamin Alexander Smellie, B.A., LL.B., Krishnarao Rambhau Joshi, B.A., Clarence E. Higher, B. St. J. Newton, B.SC., A.C.G.I. (P. W. D., Irrigation), G. M. McKelvie, B. SC., (P. W. D., Buildings and Roads).

HEADS OF DEPARTMENTS.

Commissioner of Settlements, Director of Land Records, Registrar General of Births, Deaths and Marriages and Inspector General of Registration, Charles Francis Waterfall, B.A., I.C.S.

Chief Conservator of Forests, David Otto Witt.

Excise Commissioner and Superintendent of Stamps, Geoffrey Pownall Burton, M.A., I.C.S.

Commissioner of Income-Tax, Khan Bahadur Wali Muhammad, B.A.

Postmaster General, C. J. E. Clerici, C.I.E., O.B.E.

Accountant General, John Fowler Mitchell, B. SC., I.C.S.

Judicial Commissioner, Charles Stewart Findlay, M.A., LL.B., I.C.S.

Inspector General of Prisons, Lieutenant-Colonel William Jackson Powell, B.A., I.M.S.

Inspector General of Police, Thomas Henry Morony, C.I.E.

Director of Public Instruction, Eustace Alberic Macnee I.E.S.

Lord Bishop, The Right Reverend Alex. Wood, M.A., O.B.E.

Inspector General of Civil Hospitals, Colonel John Norman Walker, I.M.S.

Director of Public Health, Colonel John Norman Walker, I.M.S.

Political Agent, Central Provinces Feudatory States, Kismet Leland Brewer Hamilton, B.A., I.C.S.

Director of Agriculture, Francis Joseph Plymen, A.C.G.I.

Veterinary Adviser to Government, Charles Waterhouse Wilson, M.R., C.V.S.

Director of Industries and Registrar, Co-operative Societies, Chief Customs Authority and Registrar, Joint Stock Companies, Chandulal Madhavlal Trivedi, I.C.S.

Chief Engineer (Irrigation Branch), Colonel H. deL. Pollard Lowsley, C.M.G., C.I.E., D.S.O., R.E.

Chief Engineer (Buildings and Roads Branch), J. A. Baker, M.I.E., C.I.E.

CHIEF COMMISSIONERS.

Colonel E. K. Elliot 1860
Lieut.-Colonel J. K. Spence (*Officiating*) .. 1862
R. Temple (*Officiating*) 1862
Colonel E. K. Elliot 1863
J. S. Campbell (*Officiating*) 1864
R. Temple 1864
J. S. Campbell (*Officiating*) 1865
R. Temple 1865
J. H. Morris (*Officiating*) 1867
E. Campbell 1867
J. H. Morris (*Officiating*) 1868

Confirmed 27th May 1870.

Colonel R. H. Keatinge, V.C., C.S.I. (*Offg.*) 1870
J. H. Morris, C.S.I. 1872
C. Grant (*Officiating*) 1879
J. H. Morris, C.S.I. 1879
W. B. Jones, C.S.I. 1883
C. H. T. Crosthwaite (*Officiating*) .. 1884

Confirmed 27th January 1885.

D. Fitzpatric (*Officiating*) 1885
J. W. Neill (*Officiating*) 1887
A. Mackenzie, C.S.I. 1887
R. J. Crosthwaite (*Officiating*) 1889

Until 7th October 1889.

J. W. Neill (*Officiating*) 1890
A. P. MacDonell, C.S.I. 1891
J. Woodburn, C.S.I. (*Officiating*) 1893

Confirmed 1st December 1893.

Sir C. J. Lyall, C.S.I., K.C.I.E. 1895
The Hon'ble Mr. D. C. J. Ibetson, C.S.I. .. 1898
,, Sir A. H. L. Fraser, K.C.S.I. (*Officiating*) 1899

Confirmed 6th March 1902.

The Hon'ble Mr. J. P. Hewett, C.S.I., C.I.E. (*Officiating*) 1902

Confirmed 2nd November 1903.

The Hon'ble Mr. F. S. P. Lely, C.S.I., K.C.I.E (*Officiating*) 1904

Confirmed 23rd Dec. 1904.

The Hon'ble Mr. J. O. Miller, C.S.I. .. 1905
S. Ismay, C.S.I. (*Officiating*) 1903

Until 21st October 1906.

A. F. T. Phillips (*Officiating*) 1907

Until 24th March 1907. Also from 20th May to 21st November 1909.

The Hon'ble Sir R. H. Craddock, K.C.S.I. 1907
,, Mr. H. A. Crump, C.S.I. .. 1912

Sub. *pro tem.* from 26th January 1912 to 16th February.

The Hon'ble Mr. W. Fox-Strangways, C.S.I., (Sub. *pro tem.*) 1912
The Hon'ble Sir B. Robertson, K.C.S.I., C.I.E. 1912
,, Mr. Crump, C.S.I. (*Officiating*) 1914
,, Sir B. Robertson, K.C.S.I. .. 1914
,, Sir Frank George Sly, K.C.S.I. I.C.S. 1919

GOVERNORS.

H. E. Sir Frank Sly, K.C.S.I. 1920
H. E. Sir Montagu Butler, Kt., C.B., C.I.E., C.V.O., C.B.E. 1925

CENTRAL PROVINCES LEGISLATIVE COUNCIL.

PRESIDENT.

The Hon. Sir Shankarrao Chitnavis, Kt., B.A., I.S.O.

EX-OFFICIO MEMBERS.

The Hon'ble Mr. Shripad Balwant Tambe, B.A., LL.B., Member of the Executive Council.
The Hon'ble Mr. Arthur Edward Nelson, M.A. (Oxon)., C.I.E., O.B.E., I.C.S., Member of the Executive Council.

MINISTERS.

The Hon'ble Mr. Raghavendra Rao, Bar-at-Law.
The Hon'ble Mr. Tukaram Jairam Kedar, BA.,LL.B.

NOMINATED MEMBERS.

Officials.

Mr. Hyde Clarendon Gowan, C.I.E., V.D., I.C.S., J.P., Chief Secretary to the Government of the Central Provinces.

Mr. Noel James Roughton, I.C.S., Finance Secretary to the Government of the Central Provinces.

Mr. Frederick Louis Grille, M.A., Bar-at-Law, Legal Remembrancer and Legal Secretary to the Government of the Central Provinces—*(Secretary to the Council.)*

Mr. Eustace Alberic Macnee, I.E.S., Director of Public Instruction and Secretary in the Education Department to the Government of the Central Provinces.

Colonel H. de L. Pollard-Lowsley, C.M.G., C.I.E., D.S.O., Chief Engineer,P.W.D. (Irrigation Branch).

Mr. Charles Francis Waterfall, I.C.S., Commissioner of Settlement, C.P.

Mr. Chandulal Madhavlal Trivedi, I.C.S., Director of Industries and Registrar, Co-operative Socities, C.P.

Mr. Edgar Ralph Stevens, I.F.S., Chief Conservator of Forests, C.P.

Non-Officials.

Raja Thakur Raghuraj Singh of Pandaria, District Bilaspur (Zamindari and Jagirdari Estates).

Mr. George Paris Dick, C.I.E., Bar-at-Law, Nagpur (European and Anglo-Indian Communities).

Mr. Rati Ram of Kewtadabri in the Bilaspur District (Depressed Classes).

Mr. Ganesh Akaji Gavai of Nagpur (Depressed Classes).

Mr. Sukhaji Urkuda Katangale of Nagpur (Depressed Classes).

Mr. Laxman Krishna Ogle, Hindu Missionary Boarding, Badnera Road, Amraoti (Depressed Classes).

Mr. A. H. Parry, C/o The Pench Valley Coal Company, Limited, Post Office Parasia, District Chhindum.

Mr. R. W Fulay, M.A ; LL.B. (Urban Factory Labourers).

ELECTED MEMBERS.

A.—Members elected from the Central Provinces.

Name.	Constituency.
Rai Bahadur Parbhat Chandra Bose, B.A., LL.B.	Jubbulpore City, Non-Muhammadan (Urban).
Mr. Keshao Rao Khandekar	Jubbulpore Division (Urban).
The Hon'ble Mr. E. Raghavendra Rao, Bar-at-Law.	Chhattisgarh Division (Urban).
Mr. Chandra Gopal Misra, B.A., LL.B.	Nerbudda Division (Urban).
Dr. N. B. Khare, M.D.	Nagpur City-cum-Kamptee.
Mr. G. R. Pradhan	Do. do.
Mr. Tukaram Jairam Kedar, B.A., LL.B. ..	Nagpur Division (Urban).
Mr. Rajendra Singh, M.R.A.S.	Jubbulpore District (South), Non-Muhammadan (Rural).
Pandit Kashi Prasad Pande, M.A., LL.B. ..	Jubbulpore District (North).
Mr. Gokulchand Singai	Damoh District.
Mr. Kedar Nath Rohan, B.SC., LL.B.	Saugor District.
Mr. Durgashanker Kripashanker Mehta ..	Seoni District.
Mr. Umesh Datta Pathak	Mandla District.
Mahant Laxminarayandas	Raipur District (North).

Name.	Constituency.
Seth Sheodas Daga	Raipur District (South).
Thakur Chedilal, Bar-at-Law	Bilaspur District.
Mr. Ghanshiam Singh Gupta	Drug District.
Mr. Gajadhar Prasad Jaiswal, B.SC., LL.B. ..	Hoshangabad District.
Seth Thakurdas Goverdhandas	Nimar District.
Chaudhari Daulatsingh	Narsinghpur District.
Mr. Vishwanath Damodar Salpekar	Chhindwara District.
Mr. Dipchand Lakshmichand	Betul District.
Mr. Krishnaji Pandurang Vaidya, B.A., LL.B. ..	Nagpur District (East)
Mr. Vinayak Vithal Kalikar	Nagpur District (West).
Mr. Govind Damodhar Charde, B.A., LL.B ..	Wardha Tahsil.
Mr. Narayan Rajaram Nagle, B.A., LL.B. ..	Wardha District.
Mr. Nilkanth Yadaorao Deotale	Chanda District.
Mr. Ganpatrao Yadaorao Pande	Bhandara District.
Rao Bahadur Narainrao Krishnarao Kelkar ..	Balaghat District.
Mr. Majiduddin Ahmed	Jubbulpore Division (Rural), Muhamamadan (Rural).
Mr. Syed Wakil Ahmad Rizir, B. A., LL. B. ..	Chhattisgarh Division (Rural).
Mr. Syed Hifazat Ali, B.A., LL.B.	Nerbudda Division (Rural).
Khan Sahib Syed Yasin Syed Lal, B.A., LL.B...	Nagpur Division (Rural)
Mr. Shyam Sunder Bhargava	Jubbulpore and Nerbudda Landholders, Special Constituencies.
The Hon'ble Sir Shankerrao Madhorao Chitnavis, Kt., I.S.O..	Nagpur and Chhattisgarh Landholders.
Mr. M. K. Golwalkar, B.A., LL.B.	Nagpur University.
Mr. L. H. Bartlett	Central Provinces and Berar Mining Association.
Seth Mathuradas Mohota	Central Provinces Commerce and Industry.

B.—Members from Berar nominated after election.

Name.	Constituency.
Mr. Pannalal Bansilal	East Berar (Municipal), Non-Muhammadan (Urban).
Mr. Purushottam Balwant Gole	West Berar (Municipal).
The Hon'ble Mr. Ramrao Madhaorao Deshmukh, Bar-at-Law	Amraoti (Central), Non-Muhammadan (Rural).
Mr. Ramrao Anandrao Deshmukh	Amraoti (East).
Mr. Uttamrao Sitaramji	Amraoti (West).
Rao Sahib Tukaram Sheoram Korde	Akola (East).
Mr. Namdeo Sadasheo Patil	Akola (North-West).
Mr. Naik Dinkarrao Dharrao Rajurkar.. ..	Akola (South).
Mr. Yadav Madhav Kale	Buldana (Central).
Mr. Panduraj Dinanath Pundalik	Buldana (Malkapur and Jalgaon).
Mr. Mahadeo Paikaji Kolhe	Yeotmal (East).
Mr. Baburao Krishnaji Patil	Yeotmal (West).
Syed Mobinur Rahman, B.A., LL.B.	Berar (Municipal), Muhammadan (Urban).
Mr. Muhammad Sharfuddin, B.A., LL.B. ..	East Berar (Rural), Muhammadan (Rural).
Khan Bahadur Mirza Rahman Beg	West Berar (Rural).
Mr. Balkrishna Ganesh Khaparde	Berar Landholders, Special Constituencies.
Mr. Brijlal Nandlal Biyani	Berar Commerce and Industry.

North-West Frontier Province.

The North-West Frontier Province, as its name denotes, is situated on the north-west frontier of the Indian Empire. It is in form an irregular strip of country lying north by east and south by west and may generally be described as the tract of country, north of Baluchistan, lying between the Indus and the Durand boundary line with Afghanistan. To the north it extends to the mountains of the Hindu Kush. From this range a long broken line of mountains runs almost due south, dividing the province from Afghanistan, until the Sulaiman Range eventually closes the south of the Province from Baluchistan. The greatest length of the province is 408 miles, its greatest breadth 279 miles and its total area about 39,000 square miles. The territory falls into three main geographical divisions: the Cis-Indus district of Hazara; the narrow strip between the Indus and the Hills, containing the Districts of Peshawar, Kohat, Bannu and Dera Ismail Khan, and the rugged mountainous regions on the north and west between those districts and the border line of Afghanistan. Hazara and the four districts in the second division contain 13,418 square miles. The mountain regions, north and west, are occupied by tribes subject only to the political control of the Chief Commissioner in his capacity as Agent to the Governor-General. The area of this tract is roughly 25,500 square miles and in it are situated, from north to south, the political agencies severally known as the Malakand, Khyber, Kurram, North Waziristan and South Waziristan Agencies. Each of the Deputy Commissioners of the five administered districts is responsible for the management of political relations with certain tribes or sections of the tribes across the frontier. A few hundred miles of the trans-border Territory are internally administered by the Political Agents, but the bulk of the trans-border population is free from any internal interference, so long as offences are not committed and so long as the tribes observe the conditions on which allowances are paid to many of them.

The area of the Province is a little more than half that of Bombay (excluding Sind and Aden) and amounts to more than three-fifths of the size of England without Wales. The density of population throughout the Province equals 130 persons to a square mile, but in the more favoured portions the pressure of population is much greater. In the Hazara District there are 208 persons to a square mile and in the trans-Indus plains tract the number is 156. The key to the history of the people of the N.-W. F. P. lies in the recognition of the fact that the valley of Peshawar was always more closely connected politically with Eastern Iran than with India, though in pre-Mahomedan times its population was mainly Indian by race. Early history finds the Iranians dominating the whole Indus valley. Then came the Greek invasion under Alexander the Great, in B. C. 327 ,then the invasions of the Sakas, and of the White Huns and later the two great waves of Muhammadan invasion. Last came the Sikh invasion beginning in 1818. The Frontier Territory was annexed by the British in 1849 and placed under the control of the Punjab Government. Frequent warfare occurred with the border tribes. The most serious phases of these disturbances were the war provoked by the aggression of Afghanistan in 1919 and the protracted punitive operations against the Waziris in 1919-1920. These have resulted in the establishment at Razmak, a position dominating the Mahsud Waziri country, of a permanent garrison of 10,000 troops drawn mostly from stations lying in the Plains immediately below the hills. A circular road from Bannu, through Razmak to Sororogha, Jandola and back to the Derajat provides communications transport with this force and facilitates its mobility. The effect of this measure has been a marked improvement in the internal peace of the Tribal area.

The division of the Frontier Province from the Punjab has frequently been discussed, with the double object, in the earlier stages of these debates, of securing closer and more immediate control and supervision of the Frontier by the Supreme Government and of making such alterations in the personnel and duties of frontier officials as would tend to the establishment of improved relations between the local British representatives and the independent tribesmen. The province was eventually removed from the control of the Punjab administration in 1901. To it was added the political charge of Dir, Swat and Chitral, the Political Agent of which had never been subordinate to the Punjab. The new Province was constituted under a Chief Commissioner and Agent to the Governor-General, with headquarters at Peshawar, in direct communication with the Government of India in the Foreign and Political Department. In political questions there is no intermediary between the Chief Commissioner and the local officer; an arrangement designed to secure both prompt disposal of references and the utilisation of the expert knowledge of frontier conditions for which the head of the administration is selected. The advisability of re-uniting the Province with the Punjab was much discussed in certain Indian political circles and as a result of the views expressed upon the matter in the Legislative Assembly the Government of India in 1922 appointed a Committee of officials and unofficials to investigate it. The Committee, presided over by Mr. D. de S. Bray, M.L.A., Joint Foreign Secretary, toured the Frontier Province and the Punjab and heard numerous witnesses. Its members were Messrs. Raza Ali, M.C.S., T. Rangachari, Chaudhri Shahabuddin, N. M. Samarth and K. B. Abdur Rahim Khan, members of the Legislative Assembly, H. N. Bolton, I.C.S., (Foreign Dept.) and A. H. Parker (I.C.S. Punjab) (members.) The inquiry developed practically into a contest between Mahomedans and Hindus on communal lines. The Hindus, allied in sympathy with their co-religionists in the Punjab demanded the reunion of the administered districts of the Province with the Punjab or, if that were not attainable then the placing of the judicial

administration of the Province under the Punjab High Court at Lahore. The Mahomedans on the other hand claimed the right of their Province to a status corresponding with that enjoyed by other Provinces of India and to immediate reforms initiating and providing for progress along that line. The Hindus argued that a separate Pathan Province on the Frontier would cause a dangerous sentimental division from the rest of India, with leanings towards the allied racial elements outside British India. The answer to that was that a contented Pathan Province would be a valuable buttress against hostile feeling across the Border. The Committee's deliberations ended in disagreement, the two Hindu members writing each a separate report favourable to the Hindu viewpoint already explained, and the majority of the Committee, comprised of all its other members, recommending advance on a Provincial basis. Their principal recommendations were for—

Retention of the Settled Districts and Tribal Tracts as a separate unit in charge of a minor administration under the Government of India;

Early creation of a Legislative Council for the Settled Districts and appointment of Member of Council and Minister;

Appointment of a second Judicial Commissioner which has since been sanctioned and reform of the judicial administration in various directions, including interchange of officers with the Punjab, so that the members of the Service in the smaller Province should have the advantage of experience in the larger one.

"If (concluded the Majority) the Pathan nationality is allowed self-determination and given scope for that self-development within the Indian Empire under the Reforms Scheme after which it is now striving we are assured that with a contented Frontier population India can face with calm resolution the future that the Frontier has in store for her."

The People.

The total population of the N.-W. F. P. (1921) is 5,076,476, made up as follows:—

Hazara	622,349
Trans-Indus Districts	1,628,991
Trans-Border Area	2,825,136

This last figure is estimated. There are only 561·3 females per 1,000 males in the towns, and 872·2 females per 1,000 males in rural areas.

This disproportion of the sexes cannot at present be explained in the N.-W. F. P. any more than in other parts of Northern India where it also appears. The discrepancy is greater here than in any other Province of India. There is no ground for believing that the neglect of girls in infancy has any effect in causing the phenomenon. On the other hand, the female population has to face many trials which are unknown to men. The evils of unskilled midwifery and early marriage are among them. Both the birth and death-rates of the Province are abnormally low. The birth rate in the administered districts, according to the last available official reports, is 26·9 and the death-rate 19·8. The birth-rate was normal below the average for the preceding quinquennium—in Hazara 35 per cent below it—a figure indicating the unusually low vitality of the people after a preceding severe epidemic of malaria. The population is naturally increasing but emigration reduces the net result.

The dominant language of the Province is Pashtu and the population contains several lingual strata. The most important sections of the population, both numerically and by social position, are the Pathans. They own a very large proportion of the land in the administered districts and are the ruling race of the tribal area to the west. There is a long list of Pathan, Baluch, Rajput and other tribal divisions. Gurkhas have recently settled in the Province. The Mahomedan tribes constitute almost the whole population, Hindus amounting to only 5 per cent. of the total and Sikhs to a few thousands. The occupational cleavage of the population confuses ethnical divisions.

Under the North-West Frontier Province Law and Justice Regulation of 1901, custom governs all questions regarding successions, betrothal, marriage, divorce, the separate property of women, dower, wills, gifts, partitions, family relations such as adoption and guardianship, and religious usages and institutions, provided that the custom be not contrary to justice, equity or good conscience. In these matters the Mahomedan or Hindu law is applied only in the absence of special custom.

Climate, Flora and Fauna.

The climatic conditions of the N.-W.F.P. which is mainly the mountainous region, but includes the Peshawar Valley and the riverine tracts of the Indus in Dera Ismail Khan District, are extremely diversified. The latter district is one of the hottest areas of the Indian continent, while on the mountain ranges the weather is temperate in summer and intensely cold in winter. The air is generally dry and hence the annual ranges of temperature are frequently very large. The Province has two wet seasons, one the S.-W. Monsoon season, when moisture is brought up from the Arabian Sea and the Bay of Bengal: the other in winter, when storms from Mesopotamia, Persia and the Caspian Districts bring widespread rain and snowfall. Both sources of supply are precarious and not infrequently either the winter or the summer rainfall fails almost entirely. The following description of the Daman, the high ground above the Indus, stretching across Dera Ismail Khan to the mountains on the west, occurs in an account written some years ago by Captain Crostwaite: "Men drink once a day and the cattle every second day. Washing is an impossible luxury. . . . It is possible in the hot weather to ride thirty miles and neither hear a dog bark nor see the smoke of a single fire." With the exception of the Kunhar River, in Hazara, which flows into the Jhelum, the whole territory drains into the Indus. The flora of the Province varies from the shrubby jungle of the south-eastern plains to barren hills, pine forests and fertile mountain valleys. Tigers used to abound in the forests but are

now quite extinct; leopards, hyenas, wolves, jackals and foxes are the chief carnivora. Bear, deer and monkeys are found; a great variety of fish is caught in the Indus.

The mountain scenery is often magnificent. The frontier ranges contain many notable peaks of which the following are the principal:—

Takht-i-Sulaiman, Sulaiman Range, in Dera Ismail Khan, 11,292 feet.

In a recent report P. A. South Waz calls it Pir Ghal and points out that the former spelling is incorrect. Fih N. A.

Pir Ghal, Sulaiman Range, in Mahsud Waziristan, 11,583 feet.

Sika Ram, in the Safed Koh, in the Kurram Agency, 15,621 feet.

Kagan Peaks of the Himalayas, in the Hazara District, 10,000 to 16,700 feet.

Istragh Peak (18,900 ft.), Kachin Peak (22,641 ft.), Tirich Mir (25,426 ft.), all in the Hindu Kush, on the northern border of Chitral Agency.

Trade and Occupations.

The population derives its subsistence almost wholly from agriculture. The Province is practically without manufactures. There is no considerable surplus of commercial products for export. Any commercial importance which the province possesses it owes to the fact that it lies across the great trade routes which connect the trans-border tribal territories and the marts of Afghanistan and Central Asia with India, but the influence of railways is diminishing the importance of these trading interests. Special mention may be made of the railway comparatively recently opened linking Baluchistan, in the south-west of the N.-W. F. P., *via* Nushki with south-east Persia. The line connects with the north-west railway system of India and extends 343 miles to Duzdap, within the Persian border. Two weekly trains run each way and the freight carried largely consists of carpets, wool and dates, from Persia and of tea, sugar and piece-goods from the Indian side. Though the railway is primarily strategic in purpose its commercial and political effects will be considerable. The travelling traders (or Powin dans) from the trans-frontierarea have always pursued their wanderings into India and now, instead of doing their trading in towns near the border, carry it by train to the large cities in India. The Railway line from Pir to Lankitshina which is complete and open to public traffic now will similarly, in course of time, develop both the manner and amount of transport communications and trade. The new roads in Waziristan are already largely utilised by the Tribal inhabitants for motor traffic. Prices of agricultural produce have in recent years been high, but the agriculturists, owing to the poverty of the means of communication, have to some extent been deprived of access to Indian markets and have therefore been unable to profit by the rates prevailing. On the other hand, high prices are a hardship to the non-agricultural classes. The effects of recent extensions of irrigation have been important. Land tenures are generally the same in the British administered districts as in the Punjab. The cultivated area of the land amounts to 32 per cent. and uncultivated to 68 per cent.

The work of civilisation is now making steady progress, both by the improvement of communications and otherwise. Relations with the tribes have improved, trade has advanced, free medical relief has been vastly extended, police administration has been reformed and the desire of people for education has been judiciously and sympathetically fostered, though in this respect there is complaint against the limitations imposed by financial embarrassments. In the British administered districts 19 per cent. males and 7 per cent. females of the total population are returned as literates. The figures for males denote a very narrow diffusion of education even for India. Those for females are not notably low, but they are largely affected by the high literacy amongst Sikh women, of whom 13·3 per cent. are returned as literate. The inauguration of a system of light railways throughout the Province, apart from all considerations of strategy, must materially improve the condition of the people and also by that means strengthen the hold of the administration over them. The great engineering project of the Upper Swat River Canal, which was completed in 1914, and the lesser work of the Paharpur Canal, also completed a few years ago, will bring ease and prosperity to a number of peasant homes.

Administration.

The administration of the North-West Frontier Province is conducted by the Chief Commissioner and Agent to the Governor-General in Council. His staff consists of—

(1) Officers of the Political Department of the Government of India.

(2) Members of the Provincial Civil Service.

(3) Members of the Subordinate Civil Service.

(4) Superintendents and Assistant Superintendents of Police.

(5) Officers recruited for the service of departments requiring special knowledge—Militia, Engineering, Education, Medicine and Forestry.

The cadre posts reserved for officers coming under the first head above are:—

	Post		Total
Administration.	Chief Commissioner & Agent to the Governor-General		5
	Secretary		
	Under-Secretary		
	Personal Assistant		
	Revenue Commissioner and Revenue Secretary		
	Resident in Waziristan		1
	Deputy Commissioners	5	12
	Political Agents	5	
	District Judges	2	
	Assistant Commissioners and Assistant Political Agents		13
Judicial Commr.'s Court & Divisional Judges.	Two Judicial Commissioners.		4
	Two Divisional and Sessions Judges.		
	One Additional ditto.		

The districts under the Deputy Commissioners are divided into from two to five sub-collectorates, in charge of tahsildars, who are invested with criminal and civil and revenue powers, and are assisted by naib-tahsildars, who exercise only criminal and revenue powers. Some sub-divisions are in charge of Assistant or Extra Assistant Commissioners. The village community characteristic of some parts of India is not indigenous among the Pathans. Its place as a social unit is to some extent taken by the tribe, which is held together by the ties of kinship and ancient ancestry, real or imaginary. Modern municipal local government has been introduced in the towns. There are also district boards. The district is the unit for police, medical and educational administration and the ordinary staff includes a District Superintendent of Police, a Civil Surgeon, who is also the Superintendent of Jail and a District Inspector of Schools. The Province forms a single educational circle and only possesses one forest division, that of Hazara. There are four divisions of the Roads and Buildings Branch of the Public Works Department, each under an Executive Engineer. The Irrigation Department of the P. W. D. is in charge of a Chief Engineer, irrigation, who is also *ex-officio* Secretary to the Chief Commissioner. The administration of the civil police force of the districts is vested in an Inspector-General. There is a special force of Frontier Constabulary. The revenue and expenditure of the Province are wholly Imperial. Of the Agencies only Kurram and Tochi Valley pay land revenue to the British Government. The revenue administration of all five administered districts is controlled by the Revenue Commissioner. For the administration of civil and criminal justice there are two Civil and Sessions divisions, each presided over by a Divisional and Sessions Judge. The two Judicial Commissioners are the controlling authority in the Judicial branch of the administration, and their Courts are the highest criminal and appellate tribunals in this Province. The improvements needed to bring the judicial administration up-to-date, in accord with the growth of the business of administration, are dealt with in the Inquiry Committee's report to which reference was made above. The principal officers in the present Administration are:—

Agent to the Governor-General and Chief Commissioner, The Hon. Sir Horatio Norman Bolton, K.C.I.E., C.S.I., I.C.S. (Assumed charge, 7th July 1923.)

Personal Assistant, Captain N. S. Alington, M.C.

Resident, Waziristan, Lt.-Col. C. E. Bruce, C.I.E., C.B.E.

Judicial Commissioner, J. H. R. Fraser, C.I.E., O.B.E.

Additional Judicial Commissioner, K. B. Saad-ud-din Khan, B.A., L.L.B.

Revenue Commissioner, (Offg) Lieut. Col. R. Garralt, I.A.

Secretary to Chief Commissioner, C. H. Gidney, I.C.S.

Under-Secretary to Chief Commissioner, K. P. S. Mennon.

Assistant Financial Secretary to Chief Commissioner, R. S. Lala Chunni Lal.

Indian Personal Assistant to Chief Commissioner, Khan Saheb Haji Arbah Shams-ud-Din Khan

Secretary, Public Works Department, Buildings and Roads Branch, Lt. Col. E. de. L. Young.

Secretary, Public Works Department, Irrigation Branch, S. Walker.

Chief Medical Officer, Lieut.-Col. C. I. Brierley, I.M.S.

Inspector-General of Police, F. C. Isemonger, C.B.E.

Commandant, Frontier Constabulary, B.C.A. Lawther.

Director of Public Instruction, J. H. Towle, I.E.S., M.A.

Superintendent, Archæological Survey, H. Hargreaves.

Divisional and Sessions Judges, J. Almond, I.C.S. (Peshawar).
Rai Bahadur Lehu Singh B.A., (Derajah).

Political Agents.

C. Latimer, C.I.E. Dir, Swat and Chitral.
Lt.-Col. W. A. Garstin, C.B.E. Khyber.
Captain C. G. N. Edwards, North Waziristan.
R. R. Maconachie, C.I.E. Kurram.
Major C.E.U. Bremner, M.C. South Waziristan.

Deputy Commissioners.

Lt.-Col. M. E. Rae. Hazara.
L. W. Jardine. Peshawar.
Major W. K. Fraser-Tytler, M.C.
Major A. E. B, Parsons, C.B.E., D.S.O. I.A., Bannu.
Major W. K. Fraser Tytler, M.C. Dera Ismail Khan.
Major Thompson Glover, O.B.E., Kohat.

Former Chief Commissioners.

Lieut.-Col. Sir Harold Deane, K.C.S.I. Died 7th July 1908.
Lieut.-Col. Sir George Roos-Keppel, G.C.I.E., K.C.S.I., to 9th September 1919.
The Hon. Sir Alfred Hamilton Grant, K.C.I.E., K.C.S.I., from September 1919 to 8th March 1921.
The Hon. Sir John Loader Maffey, K.C.V.O., C.S.I., C.I.E., I.C.S., from 8th March 1921 to 6th November 1925.

The Province of Assam, omitting the partly administered and unadministered tracts on its northern and eastern borders, comprises an area of some 63,510 square miles. It includes the Assam Valley Division, the Surma Valley and Hill Division and the State of Manipur. It owes its importance to its situation on the north-east frontier of India. It is surrounded by mountainous ranges on three sides while on the fourth (the west) lies the Province of Bengal on to the plains of which debouch the two valleys of the Brahmaputra and the Surma which form the plains of Assam. These two valleys are separated from each other by the Assam Range, which projects westward from the hills on the eastern border.

Population.

The total population of the Province in 1921 was 7,990,246, of whom 384,016 were in Manipur. Of the population in 1921, 2½ millions were Mahomedans, 4½ millions Hindus and 1½ millions Animists. 44 per cent. of the population speak Bengali, 22 per cent. speak Assamese: other languages spoken in the province are Hindi, Uriya and a great variety of languages classified under the general heading of the Tibeto-Chinese languages. Owing to the great areas of waste and rivers the density of the province is only 130, which compared with that of most other parts of India is low, but is more than double that of Burma.

Agricultural Products.

It has agricultural advantages for which it would be difficult to find a parallel in any part of India, climate, soil, rainfall and river systems all being alike favourable to cultivation. Rice is the staple food crop, nearly 5 million acres being devoted to this crop. Except in the Himalayan Terai irrigation is unnecessary. Tea and jute are the most important crops grown for export. The area under tea consists of 420,564 acres. Wheat and tobacco are also grown and about 66 square miles are devoted to sugarcane.

Meteorological Conditions.

Rainfall is everywhere abundant, and ranges from 67 to 229 inches. The maximum is reached at Cherrapunji in the Khasi Hills, which is one of the wettest places in the world, having a rainfall of 458 inches. The temperature ranges from 59 at Sibsagar in January to 84·8 in July. Earthquakes of considerable severity have taken place, by far the worst being that which occurred in 1897.

Mines and Minerals.

The only minerals in Assam worked on a commercial scale are coal, limestone and petroleum oil. The most extensive coal measures are in the Naga Hills and the Lakhimpur districts, where about 350,000 tons are raised annually. Limestone is quarried in the Khasi and Jaintia Hills, in Sylhet, and in the Garo hills. Petroleum is worked only in Lakhimpur and Cachar.

An account of the petroleum occurrences in Assam was recently published in the memoirs of the Geological Survey of India. It states that the petroleum localities in this province are confined to a curved belt of country along the basins of the Brahmaputra and Surma. This belt is traceable over a distance of some 800 miles from N. E. Assam through Cachar and Chittagong to the Arakan coast, where it has a S.S.E. trend.

Manufactures and Trade.

Silk is manufactured in the Assam Valley, the weaving being done by the women. Cotton weaving is also largely practised by the women, and almost every house contains a loom; the cloth is being gradually displaced by imported goods of finer texture and colour. Tea manufacture is the most important industry of the province. Boat building, brass and metal and earthenwares, and limestone burning are the other industries apart from agriculture, which itself employs about 89 per cent. of the population. Assam carries on a considerable trade with the adjoining foreign tribes and countries.

Communications.

The trade of Assam is chiefly carried by river, but increasing use is being made of the Assam-Bengal Railway which runs from the port of Chittagong through the North Cachar Hills to Tinsukia, a station on the Dibru-Sadiya Railway, and connects the Surma and Brahmaputra Valleys. A branch of the line runs from Badarpur to Silchar at the eastern end of the Surma Valley and another runs through the west of the Assam Valley from Lumding to Gauhati where it effects a junction with the Eastern Bengal Railway. The Eastern Bengal Railway connects Assam with the Bengal system *via* the valley of the Brahmaputra. The excellence of its water communication makes Assam less dependent upon roads than other parts of India; but in recent years the road system has been developed and there is an unmetalled trunk road through the whole length of the Brahmaputra Valley and an excellent road from Gauhati to Shillong. A large fleet of steamers maintained by the India General Steam Navigation Company and the Rivers Steam Navigation Company plies on the rivers of both valleys. An alternate day service of passenger boats runs between Goalundo and Dibrugarh. The Government of Assam have now launched into a large programme of road improvements.

THE FINANCES OF ASSAM.

In common with the other Provinces of India, Assam secured substantial financial autonomy under the Reform Act of 1919. The present financial position is set out in the following table:—

Estimated Provincial Revenue for 1928-29.

	(In Thousands of Rupees.)
Taxes on Income	6,10
Land Revenue	1,19,01
Excise	68,73
Stamps	20,75
Forest	40,39
Registration	2,35

Estimated Provincial Revenue for 1928-29.—(contd.)

(In Thousands of Rupees.)

State Railways (net	..
Interest	1,64
Administration of Justice	2,00
Jails and Convict Settlements	1,07
Police	1,92
Education	2,64
Medical	2,08
Public Health	68
Agriculture	1,32
Industries	8
Miscellaneous Departments	..
Civil Works	4,12
In aid of Superannuation	23
Stationery and Printing	13
Miscellaneous	2,97
Miscellaneous adjustments between the Central and Provincial Governments	..
Provincial loan account	1,87
Famine Insurance Fund	2
Government Press--Depreciation Fund	6
Total Receipts	2,80,06
Opening Balance	68,05
Grand Total	3,48,11

Estimated Provincial Expenditure for 1928-29.

(Reserved)—	
Land Revenue	20,17
Stamps	91
Forest	22,18
State Railways	..
Subsidised Companies	9
Miscellaneous Railway expenditure	3
Construction of Railways	..
Navigation, Embankments and Drainage Works	1,04
Interest on ordinary debt	—41
General Administration	28,69
Administration of Justice	10,60
Jails and Convict Settlements	4,90
Police	25,18
Police (Assam Rifles)	3,88
Ports and Pilotage	68
Scientific Departments	11
Education (European)	77
Miscellaneous Departments	27
Civil Works	63,76
Famine Relief and Insurance	..
Superannuation Allowances and Pensions	9,55
Stationery and Printing	3,45
Miscellaneous	1,24
Contributions and assignments to the Central Government by the Provincial Government	7,17
Miscellaneous adjustment between Central and Provincial Governments, Capital outlay on Forests (Goalpara tramway side)	11
(Transferred)—	
Excise	9,23
Registration	1,59
General Administration	1,18
Scientific Depts.	1
Education (other than European)	30,19
Medical	13,37
Public Health	8,17
Agriculture	7,04
Industries	2,13
Miscellaneous Departments	2

Estimated Provincial Expenditure for 1928-29.—(contd.)

(In Thousands of Rupees.)

Civil Works	8,06
Stationery and Printing	84
Miscellaneous	3,20
Payment of commuted value of pensions	3,45
Loans and Government Advances by Assam	4,95
Total Disbursements	2,97,80
Closing balance	50,31
Grand Total	3,48,11

Administration.

The province of Assam was originally formed in 1874 in order to relieve the Lieutenant-Governor of Bengal of part of the administration of the huge territory then under him. In 1905, as the result of further deliberations, it was decided to add to the small Province of Assam the eastern portion of its unwieldy neighbour and to consolidate those territories under a Lieutenant-Governor. The Province of Eastern Bengal and Assam as then constituted was again broken up on the 1st of April, 1912: the Eastern Bengal Districts were united with the Bengal Commissionerships of Burdwan and the Presidency to form the Presidency of Bengal under a Governor-in-Council, Bihar, Chota Nagpur and Orissa were formed into a separate province, while the old Province of Assam was re-constituted under a Chief Commissioner.

Under the Indian Reforms Act of 1919 the Province was raised in status to that of administration by a Governor-in-Council and was thereby ranked, with certain minor provinces to suit its undeveloped character with the older major provinces of India.

The capital is Shillong, a town laid out with great taste and jndgment among the pine woods on the slopes of the Shillong Range which rises to a height of 6,450 feet above the sea. It was destroyed in the earthquake of 1897 and has been rebuilt in a way more likely to withstand the shocks of earthquake.

Governor.

H. E. Sir Egbert Laurie Lucas Hammond, K.C.S.I., C.B.E., I.C.S.

Executive Council.

The Hon'ble Khan Bahadur Kutub-ud-din Ahmad—*Vice-President.*

The Hon'ble Mr. Arthur William Botham, C.S.I., C.I.E., I.C.S.

Ministers to His Excellency the Governor.

The Hon'ble Sir Saiyid Muhammad Saadulla, Kt., M.A., B.L.

The Hon'ble the Rev. James Joy Mohan Nichols-Roy, B.A.

Personal Staff of His Excellency the Governor.

Private Secretary, Lieut. J. M. W. Martin, B.A., 68th Field Battery.

Aide-de-Camp, Lieut. d'A P. P. Thompson, King's Shropshire Light Infantry.

Honorary Aide-de-Camp, Sardar Bahadur Subadar Pokul Thapa.

Honorary Aide-de-Camp, Subadar-Major Nainsing Mall.

Honorary Aide-de-Camp, Lieutenant-Colonel J. J. T. MacKnight, V.D.

Secretaries, etc., to Government.

Chief Secretary, G. E. Soames, C.I.E. I.C.S.

Secretary to Government (Transferred Departments), R. Friel, I.C.S.

Secretary to Government (Finance and Revenue) H. M. Prichard, I.C.S.

Under Secretary to Government, H. Weightman, I.C.S.

Under Secretary (Transferred Departments), G. S. Guha, M.A., B.L.

Secretary to Government (Legislative Department). and Secretary to the Assam Legislative Council, B. N. Rau, I.C.S.

Secretary to Government in the P.W.D., B. A. Blenkinsop, I.S.E. (offg.)

Under Secretary, P.W.D., K. E. L. Pennell, I.S.E., M.C.

Assistant Secretary, Finance and Revenue Departments, A. V. Jones.

Registrar, Assam Secretariat (Civil), Rai Bahadur Mahendra Kumar Gupta.

Registrar, Assam Secretariat (P. W. D.), Babu Lalit Lal Mitra (offg.)

Heads of Departments.

Director of Land Records, Registrar of Joint Stock Companies, etc., W. L. Scott, I.C.S.

Director of Agriculture and Industries, Rai Bahadur Radha Nath Phukan (offg.)

Superintendent, Civil Veterinary Department, W. Harris.

Conservator of Forests, Eastern Circle, F. H. Cavendish.

Conservator of Forests, Western Circle, W. R. Le G. Jacob.

Commissioner of Excise, Assam, F. A. S. Thomas, I.C.S.

Director of Surveys, Col. A. A. McHarg., D.S.O., R.E.

Superintendent and Remembrancer of Legal Affairs and Administrator General, B. N. Rau, I.C.S.

Inspector General of Police, W. C. M. Dundas, C.I.E.

Director of Public Instruction, G. A. Small (acting).

Inspector General of Civil Hospitals and Prisons, Col. G. Hutcheson.

Director of Public Health, Lt.-Col. T. D. Murison.

Chief Engineer, B. A. Blenkinsop (offg.).

Governors.

Sir Nicholas Dodd Beatson Bell, K.C.S.I., K.C.I.E., 1921.

Sir William Sinclair Marris, K.C.S.I., K.C.I.E., 1922.

Sir John Henry Kerr, K.C.S.I., K.C.I.E., 1925.

Sir William James Reid, K.C.I.E., C.S.I., 1925.

Sir Egbert Laurie, Lucas Hammond, K.C.S.I., C.B.E., 1927.

ASSAM LEGISLATIVE COUNCIL.

The Hon'ble Maulavi Abdul Hamid .. .. (*President*)
Babu Gopendraolal Das Chaudhuri .. .. (*Deputy President*)

Names.	Constituency.	
ELECTED MEMBERS.		
Rev. James Joy Mohon Nichols-Roy	Shillong (General Urban).	
Babu Jatindra Mohan Deb Laskar	Silchar	(Non-Muhammadan Rural
Babu Hirendra Chandra Chakravarty.. ..	Hailakandi	ditto.
Babu Basanta Kumar Das	Sylhet Sadr	ditto
Babu Brajendra Narayan Chaudhury.. ..	Sunamgant	ditto
Babu Gopendralal Das Chaudhuri	Habiganj (North)	ditto.
Babu Rasik Lal Nandy Mazumdar	Habiganj (South)	ditto
Babu Paresh Lal Shome Chaudhury	South Sylhet	ditto.
Rai Bahadur Ramani Mohan Das	Kainganj	ditto
Srijut Mukunda Narayan Barua	Dhubri	ditto
Srijut Bepin Chandra Ghosh	Goalpara	ditto
Srijut Rohni Kumar Chaudhury	Gauhat	ditto
Srijut Kameswar Das	Barpeta	ditto
Srijut Mahadev Sarma	Tezpur	ditto.
Srijut Nabin Chandra Bardalai	Mangaldai	ditto
Sriiut Bishnu Charan Borah	Nowgong	ditto.
Mr. Taraprasad Chaliha	Sibsagar	ditto.
Srijut Rohini Kanta Hati Barua	Jorhat	ditto
Srijut Kuladhar Chaliha	Golaghat	ditto.
Lakeshwar Barua	Dibrugarh	ditto.
Srijut Sarveswar Barua	North Lakhimpur	ditto.
Maulavi Arzan Ali Majumdar	Cachar	(Muhammadan Rural).
Maulavi Abdul Hamid	Sylhet Sadr (North)	ditto.
Maulavi Abdul Hamid Chaudhury	Sylhet Sadr (South)	ditto.
Maulavi Munawwarali	Sunamganj	ditto
Khan Bahadur Hazi Muhammad Bakht Mazumdar	Habiganj (North)	ditto.
Maulavi Sayed Samiur Rahman	Habiganj (South)	ditto.
Maulavi Ali Haidar Khan	South Sylhet	ditto.
Maulavi Mahmud Ali	Karimganj	ditto.
Khan Sahib Maulavi Muhammad Abdul Latif, M.B.E.	Dhurbri excluding South Salmara Thana.	ditto.
Maulavi Mizanar Rahman	Goalpara *cum* South Salmara Thana	ditto
The Hon'ble Maulavi Saiyid Muhammad Saadulla	Kamrup and Darrang *cum* Nowgong	ditto.
Maulavi Keramat Ali	Sibsagar *cum* Lakhimpur	ditto.
Mr. Hamilton Alexander Gardner	Assam Valley Planting	
Mr. Charles H. Witherington	Ditto.	
Lieutenant-Colonel Hubert Champion Garbelt, V.D.	Ditto.	
Mr. H. M. James	Surma Valley Planting	
Mr. W. E. D. Cooper	Ditto	
Mr. Kasinath Saikia	Commerce and Industry.	

NOMINATED MEMBERS.

Officials.

Mr. G. E. Soames, I.C.S.,
,, B. A. Blenkinsop.
,, W. L. Scott.
,, H. M. Prichard.
,, R. Friel, I.C.S.

Non-Officials

Rai Bahadur Amar Nath Ray.
Rai Bahadur Sadananda Dowera.
Khan Bahadur Dewan Sahib Abdul Hamid Chaudhuri,
Maulavi Sayidur Rahman.
Mr. Douglas Smart Withers, representing the Labouring Classes.
Revd. John Ceredig Evans, representing the inhabitants of backward tracts.
Rai Bahadur Radha Kanta Handiqui.
Srijut Rabindra Narain Chaudhuri.

Baluchistan is an oblong stretch of country occupying the extreme western corner of the Indian Empire. It is divided into three main divisions: (1) British Baluchistan with an area of 9,476 square miles consisting of tracts assigned to the British Government by treaty in 1879; (2) Agency Territories with an area of 44,345 square miles composed of tracts which have, from time to time, been acquired by lease or otherwise brought under control and placed directly under British officers; and (3) the Native States of Kalat and Las Bela with an area of 78,434 square miles. The Province embraces an area of 134,638 square miles and according to the census of 1921 it contains 799,625 inhabitants.

The country, which is almost wholly mountainous, lies on a great belt of ranges connecting the Safed Koh with the hill system of Southern Persia. It thus forms a watershed the drainage of which enters the Indus on the east and the Arabian Sea on the south while on the north and west it makes its way to the inland lakes which form so large a feature of Central Asia. Rugged, barren, sun-burnt mountains, rent by high chasms and gorges, alternate with arid deserts and stony plains, the prevailing colour of which is a monotonous sight. But this is redeemed in places by level valleys of considerable size in which irrigation enables much cultivation to be carried on and rich crops of all kinds to be raised.

The political connection of the British Government with Baluchistan commenced from the outbreak of the First Afghan War in 1839; it was traversed by the Army of the Indus and was afterwards occupied until 1842 to protect the British lines of communication. The districts of Kachi, Quetta and Mastung were handed over to the Amir of Afghanistan and Political Officers were appointed to administer the country. At the close of the First Afghan War, the British withdrew and these districts were assigned to the Khan of Kalat. The founder of the Baluchistan Province as it now exists was Sir Robert Sandeman who broke down the close border system and welded the Baluch and Brahui Chiefs into a close confederacy. In the Afghan War of 1879 Pishin, Shorarud, Sibi, Zawara Valley and Thal-Chotiali were handed over by Yakub Khan to the British Government and retained at Sir Robert Sandeman's strenuous insistence.

Industries.

Baluchistan lies outside the monsoon area and its rainfall is exceedingly irregular and scanty. Shahrig, which has the heaviest rainfall, records no more than 11¾ inches in a year. In the highlands few places receive more than 10 inches and in the plains the average rainfall is about 5 inches, decreasing in some cases to 3. The majority of the indigenous population are dependent for their livelihood on agriculture, provision and care of animals and transport. The majority of the Afghan and the Baluch, as a rule, cultivate their own lands. The Brahuis dislike agriculture and prefer a pastoral life. Previous to the advent of the British life and property were so insecure that the cultivator was fortunate if he reaped his harvest. The establishment of peace and security has been accompanied by a marked extension of agriculture which accounts for the increase in the numbers of the purely cultivating classes. The Mekran Coast is famous for the quantity and quality of its fish and the industry is constantly developing. Fruit is extensively grown in the highlands and the export is increasing.

Education is imparted in 99 public schools of all kinds, with 5,846 scholars. There is a distinct desire for education amongst the more enlightened headmen round about Quetta-Pishin and other centres where the Local Government with its officers stays at certain seasons, such as Sibi and Ziarat; but on the whole education or the desire of it has made little or no advance in the outlying districts. The mineral wealth of the Province is believed to be considerable, but cannot be exploited until railways are developed. Coal is mined at Sharigh on the Sind-Pishin railway and in the Bolan Pass. The output of coal in 1927-28 was 14,714 tons. Chromite is extracted in the Zhob District near Hindubagh. The Chrome output fell off owing to poorer demand. Lime-stone is quarried in small quantities. The output of Chromite during 1927-28 amounted to 14,034 tons.

Administration.

The head of the local administration is the officer styled Agent to the Governor-General and Chief Commissioner. Next in rank comes the Revenue Commissioner who controls the revenue administration and exercises the functions of a High Court as Judicial Commissioner of the Province. The keynote of administration in Baluchistan is self-government by the tribesmen, as far as may be, by means of their Jirgas or Councils of Elders along the ancient customary lines of tribal law, the essence of which is the satisfaction of the aggrieved and the settlement of the feud, not retaliation on the aggressor or the vindictive punishment of a crime. The district levies which normally numbered 2,300 odd play an unobtrusive but invaluable part in the work of the Civil administration not only in watch and ward and the investigation of crime, but also in the carrying of the mails, the serving of processes and other miscellaneous work. In addition to these district levies there are ordinarily two irregular Corps in the Province; the Zhob Militia and the Mekran Levy Corps. The Province does not pay for itself and receives large subsidies from the Imperial Government.

Agent to the Governor-General and Chief Commissioner in Baluchistan. The Hon'ble Lt.-Col. H. B. St. John, C.I.E., C.B.E.

Revenue and Judicial Commissioner, Lt.-Col. E. H. S. James, C.I.E., C.B.E.

Secretary, Public Works Department, Brigadier W. H. Evans, C.I.E., D.S.O., R.E.

Secretary to the Agent to the Governor-General and Chief Commissioner. Lieut-Colonel C. T. C. Plowden.

Political Agent, Zhob, Major Severn Williams.

Political Agent, Kalat and Bolan Pass, Lt.-Col. J. A. Brett, C.I.E.

Political Agent and Deputy Commissioner Quetta, Mr. R. E. L. Wingate, I.C.S.

Political Agent, Sibi. Major G. L. Betham, M.C.
Political Agent, Loralai. Mr. H. D. G. Law, C.I.E., I.C.S.

Assistant Political Agent and Assistant Commissioner, Quetta-Pishin, Capt. R. R. Burnett.
Political Agent, Chagai, Capt. H. M. Poulton.
Political Agent, Sibi, Major G. L. Betham, M.C.
Assistant Political Agent, Sibi, Sardar Sahib Gurdit Singh.

Residency Surgeon and Chief Medical Officer, Lt.-Col. F. E. Wilson, I.M.S.

Civil Surgeon, Sibi, Lt.-Col. J. Anderson.
Civil Surgeon, Quetta, Major R. L. Vance, I.M.S.

ANDAMAN AND NICOBAR ISLANDS.

This is a group of islands in the Bay of Bengal of which the headquarters are at Port Blair by sea 780 miles from Calcutta, 740 miles from Madras and 360 miles from Rangoon, with which ports there is regular communication.

The land area of the islands under the administration is 3,143 square miles, namely, 2,508 square miles in the Andamans and 635 square miles in the Nicobars. The total population is 26,459. The Islands are administered by the Chief Commissioner of the Andaman and Nicobar Islands who is also the Superintendent of the Penal Settlement. The penal settlement, which was established in 1858, is the most important in India.

Chief Commissioner of Port Blair, Lieut.-Col. M. L. Ferrar, C.S.I., C.I.E., O.B.E., I.A.
Commandant, Military Police, Lt.-Col. G. C. Wheeler, V.C., I.A.

Senior Medical Officer and Civil Surgeon, Major J. M. R. Hennessy, I.M.S.

COORG.

Coorg is a small petty Province in Southern India, west of the State of Mysore. Its area is 1,582 square miles and its population 174,976. Coorg came under the direct protection of the British Government during the war with Sultan Tippu of Seringapatam. In May 1834, owing to misgovernment, it was annexed. The Province is directly under the Government of India and administered by the Chief Commissioner of Coorg who is the Resident in Mysore with his headquarters at Bangalore. In him are combined all the functions of a local government and a High Court. The Secretariat is at Bangalore where the Assistant Resident is styled Secretary to the Chief Commissioner of Coorg. In Coorg his chief authority is the Commissioner whose headquarters are at Mercara and whose duties extend to every branch of the administration. A Legislative Council consisting of 15 elected members and five nominated members was created in 1923. The chief wealth of the country is agriculture and especially the growth of coffee. Although owing to overproduction and insect pests coffee no longer commands the profits it once enjoyed, the Indian output still holds its own against the severe competition of Brazil. The bulk of the output is exported to France.

Chief Commissioner, Coorg—The Hon. Mr. S. E. Pears, C.S.I., C.I.E., I.C.S. (on leave); Mr. L. M. Crump, C. I. E. (*Offg.*)

AJMER-MERWARA.

Ajmer-Merwara is an isolated British Province in Rajputana. The Agent to the Governor-General in Rajputana administers it as Chief Commissioner. The Province consists of two small separate districts, Ajmer and Merwara, with a total area of 2,711 square miles and a population of 501,395. At the close of the Pindari war Daulat Rao Scindia, by a treaty, dated June 25, 1818, ceded the district to the British. Fifty-five per cent. of the population are supported by agriculture, the industrial population being principally employed in the cotton and other industries. The principal crops are maize, millet, barley, cotton, oilseeds and wheat.

Chief Commissioner, The Hon. Mr. L. W. Reynolds, C.I.E., M.C.

Aden.

Aden was the first new territory added to the Empire after the accession of Queen Victoria. Its acquisition in 1839 was the outcome of an outrage committed by the local Abdali chief upon the passengers and crew of a British bungalow wrecked in the neighbourhood. Various acts of treachery supervened during the negotiations regarding the bungalow outrage and Aden was captured by a force sent by the Bombay Government under Major Baillie. The act has been described as one of those opportune political strokes which have given geographical continuity to British possessions scattered over the world.

Aden is an extinct volcano, five miles long and three broad, jutting out to sea much as Gibraltar does, having a circumference of about 15 miles and connected with the mainland by a narrow isthmus of flat ground. This is nearly covered at one part at high spring tides, but the causeway and aqueduct are always above, though sometimes only just above water. The highest peak on the wall of precipitous hills that surrounds the old crater which constitutes Aden is 1,775 feet above sea level. Rugged spurs, with valleys between, radiate from the centre to the circumference of the crater. A great gap has been rent by some volcanic disturbance on the sea surface of the circle of hills and this opens to the magnificent harbour. The peninsula of Little Aden, adjacent to Aden proper, was obtained by purchase in 1868 and the adjoining tract of Shaikh Othman, 39 square miles in extent, was subsequently purchased when, in 1882, it was found necessary to make provision for an overflowing population.

Attached to the settlement of Aden are the Islands of Perim, an island of 5 square miles extent in the Straits of Bab-el-Mandeb, in the entrance to the Arabian Sea; Sokotra island, at the entrance to the Gulf of Aden, in the Arabian Sea, came under the British sphere of influence by a Protectorate treaty in 1886 and 1,382 miles in extent; and the five small Kuria Muria islands, ceded by the Imam of Maskat in 1854 for the purpose of landing the Red Sea cable, and otherwise valuable only for the guano deposits found upon them. They are off the Arabian coast about two-thirds of the way from Aden to Maskat. The whole extent of the Aden settlement, including Aden, Little Aden, Shaikh Othman and Perim, is approximately 80 miles. The 1921 census showed Aden, with Little Aden, Shaikh Othman, and Perim to have a population of 56,571. The population of Perim is 2,075 largely dependent on the Coal Depot maintained there by a commercial firm. That of Sokotra is 12,000, mostly pastoral and migratory inland, fishing on the coast.

Strategic Importance.

Aden's first importance is as a naval and military station of strategic importance. This aspect was ably discussed by Colonel A. M. Murray, in his "Imperial Outposts." He points out that Aden is not a naval base in the same sense that Gibraltar, Malta and Hong-Kong were made, but a *point d'appui*, a rendezvous and striking point for the fleet. It was seized in 1839 because of its usefulness as a harbour of refuge for British ships and from a strategist's point of view this is its primary purpose and the *raison d'etre* of its forts and garrison. Aden under British rule has retained its ancient prestige as a fortress of impregnable strength, invulnerable by sea and by land, dominating the entrance to the Red Sea, and valuable to its owners as a commercial emporium, a port of call and a cable centre. The harbour extends 8 miles from east to west and 4 from north to south and is divided into two bays by a spit of land. The harbour is dredged to 30 below I.S. L.W. and is approached by a dredged cut of the same depth. This cut extends seaward to join the 5 fathom contour and thus gives a depth at low water spring tides of 5 fathoms for vessels entering the Port. The junction of this cut with the 5 fathom contour is marked by the fairway buoy which carries a flashing red light. The bottom is sand and mud. There are several islands in the inner bay. Strategic control of the Red Sea was rendered complete by the annexation of Perim and by a Protectorate treaty with the Sultan of Sokotra, which may both be regarded as outposts of Aden, and are under the political jurisdiction of the Resident.

The Arab chiefs of the hinterland of Arabia are nearly all stipendiaries of the British Government. Colonel Wahab and Mr. G. H. Fitzmaurice, of the Constantinople Embassy, were appointed in 1902, as Commissioners to delimitate the frontier between Turkish Arabia and the British protectorate around Aden. A convention was signed in 1905 settling details, the frontier line being drawn from Shaikh Murad, a point of the Red Sea coast opposite Perim, to the bank of the river Bana, the eastern limit of Turkish claims, at a point some 29 miles north-east of Dthala, and thence north-east to the great desert. The area left within the British Protectorate was about 9,000 square miles. The arrangement gave to Turkey Cape Bab-el-Mandeb, which forms the Arabian bank of the eastern channel past Perim into the Red Sea. A sanitorium and small British garrison used to be maintained at Dthala, which is 7,700 feet high, but the garrison was withdrawn in 1906, Lord Morley explaining this step as being in accordance with the policy stated in the House of Lords in 1903,—that His Majesty's Government had never desired to interfere with the internal and domestic affairs of the tribes on the British side of the boundary, but had throughout made it plain that they would not assent to the interference of any other Power with those affairs. Affairs in this respect have been disarranged considerably by the war.

British Policy.

There has been much criticism of a policy under which Aden has failed to advance with the same progressive strides which have marked the development of other British dependencies. It is said that the former Persian possessors of Aden built its wonderful water tanks, and the Arabs made an aqueduct 20 miles long, while the British have done nothing except mount guns to protect their coal yards. Trade, it is argued, flourishes because this is a natural emporium of commerce, but not because of the attention its needs get from Government. Lord Roberts, writing on this point a few years ago, said: "It is not creditable to British rule to make use of a dependency like Aden for selfish purposes of political necessity without attempting to extend the benefits of civilised Government to the neighbouring native tribes, especially when those tribes are living under the aegis of the British Crown. The Persians, the Turks and even the Arabs did more for Aden in their time than we have done during our seventy years' occupation........Aden has always suffered under the disadvantage of being an appanage of the Bombay Presidency, with which it has neither geographical, racial nor political affinity. Probably the best solution of the matter would be to hand over the place to the Colonial Office, relieving the Government of Bombay of a charge which is only looked upon as an incubus." This question has now been finally decided. As explained below, His Majesty's Government are now responsible for the military and political administration of Aden, the Government of India remaining responsible for the internal administration of the settlement management has no doubt resulted in a dual control. But the change has been found necessary because Aden has assumed a far wider importance in Imperial Communications from that of a port of call in the voyage to India and because it is hoped that the cost of its defence might be reduced if it was treated as a part of the Middle East.

Language.

The language of the settlement is Arabic, but several other Asiatic tongues are spoken. The population is chiefly returned as Arabs and Shaikhs. The Somalis from the African coast and Arabs do the hard labour of the port. So far as the settlement is concerned the chief industries are salt and cigarette manufacture. The crops of the tribal low country adjoining are jowar, sesamum, a little cotton, madder

a bastard saffron and a little indigo. In the hills, wheat, madder, fruit, coffee and a considerable quantity of wax and honey are obtained. The water supply forms the most important problem. Water is drawn from four sources—wells, aqueducts, tanks or reservoirs and condensers. This problem of water supply appears to have been now nearly solved. An artesian supply of fresh water has been obtained at Sheikh Othman. Water from a depth of some 1,600 feet is flowing from the bore hole at the surface and the supply is capable of giving one hundred thousand gallons per day by means of pumps.

The discovery of artesian suppliesof fresh water at Aden by the Bombay Government has removed one of the greatest hardships to the growth of that very important sea port, frequently referred to as the Gibralter of the East and should cause much satisfaction to the residents, since the cost of sweet water hitherto only obtainable in normal years by distillation has been about fifty times higher than the water rates, usually payable to Municipalities in India. The urgent need of a fresh water supply at Aden can be realised the better when it is stated that it has a population of some 40,000 souls and that over 1,500 vessels enter the port annually, carrying on trade amounting to from 15 to 20 millions sterling per year. It is the only port at which ships call for water between the Suez Canal and India or Ceylon and upto the present time, this supply has been met by the costly process of condensing sea water.

Administration.

The administration of Aden was in former times directly under the Government of Bombay. In 1920, the political control of Aden, which was exercised during the period of the war by the High Commissioner of Egypt, was retransferred to the Political Resident, Aden, who was to be directly responsible to the Foreign Office. In 1921, this responsibility was taken over by the Colonial Office. The future of the Protectorate has been the subject of no little discussion and various proposals have been put forward. At one time the idea that it should be transferred to the Colonial Office was seriously entertained. The proposals met with warm disapproval, from the important Indian community in Aden whose views were supported in India. There has been much friction between India and the Colonial Office over the status of Indians in theDominions and some of the Crown Colonies, and the lukewarmness of the Colonial Office in protecting their rights was much resented. Therefore transfer to the Colonial Office was opposed as transfer to an unknowing and unsympathetic administration. On the 11th July 1922 the Under-Secretary of State for the Colonies stated in the House of Commons that there was no prospect of the Colonial Office taking over the control of Aden in the near future. Deliberations between the Government of India and the Imperial Government reached their conclusion during 1927 and the decisions finally taken were announced by the Government of India in the Legislative Assembly assembled in Delhi during the Budget debates in March, 1927. The new arrangements came into operation on April 1st, 1927. Under the new conditions, the Imperial Government are responsible for the military and political situation in Aden and its Hinterland. The settlement of Aden itself, which is to a large degree peopled by Indians, remains under the Government of India. The financial settlement required by this division of authority provides for the payment by India to Imperial Revenues of £250,000 a year for three years and thenceforward of £150,000 a year. The larger amount is considerably less than the annual expenditure falling upon Indian revenues under the former system of control.

The administration is conducted by a Resident, who is assisted by four Assistants. The Resident is also ordinarily General Officer Commanding and has hitherto usually been an officer selected from the Indian army, as have his assistants. Since the introduction of the dual control referred to above, the Resident's post is to be held alternately by an Office of theIndian Service and by a member of the Colonial service. The Court of the Resident is the Colonial Court of Admiralty under Act XVI of 1891, and its procedure as such is regulated by the provisions of the Colonial Courts of the Admiralty Act 1890 (53 and 54 Vicc, Chapter 27). The laws in force in the settlement are generally speaking those in force in the Bombay Presidency, supplemented on certain points by special regulations to suit local conditions. The management of the port is under the control of a Board of Trustees formed in 1888. The principal business of the Port Trust has been the deepening of the harbour, so as to allow vessels of all sizes to enter and leave at all states of the tide. The Aden police force consists of land and harbour police who number 322 and 54 respectively. There are hospitals and dispensaries in both Aden and Perim, in addition to the military institutions of this character. The garrison comprises a troop of engineers, three companies of garrison artillery, one battalion of British infantry, two companies of sappers and miners and one Indian regiment. Detachments from the last named are maintained at Perim and Shaikh Othman respectively.

Climate.

The average temperature of the station is 87 degrees in the shade, the mean range being from 75 in January to 98 in June, with variations up to 102. The lulls between the monsoons, in May and September, are very oppressive. Consequently, long residence impairs the faculties and undermines the constitution of Europeans and even Indians suffer from the effects of too long an abode in the settlement, and troops are not posted in the station for long periods, being usually sent there one year and relieved the next. But Aden is exceptionally free from infectious diseases and epidemics, and the absence of vegetation, the dryness of the soil and the purity of the drinking water constitute efficient safeguards against many maladies common to tropical countries. The annual rainfall varies from ½ inch to 8½ inches, with an irregular average of 3 inches.

Political Resident Lieut-Col. Sir Stewart Symes, C.M.G., D.S.O.

1. J. T. Lawrence, I.C.S., Judicial Assistant.
2. Major T. C. W. Fowle.
3. ,, G. T. Fisher.
4. Captain G. A. Falconer.

The Home Government.

The Home Government of India represented for sixty years the gradual evolution of the governing board of the old East India Company. The affairs of the Company were originally managed by the Court of Directors and the General Court of Proprietors. In 1784 Parliament established a Board of Control, with full power and authority to control and direct all operations and concerns relating to the civil and military government, and revenues of India. By degrees the number of the Board was reduced and its powers were exercised by the President, the lineal precursor of the Secretary of State for India. With modifications this system lasted until 1858, when the Mutiny, followed by the assumption of the Government of India by the Crown, demanded a complete change. Under the Act of 1858 (merged in the consolidating measure passed in 1915) the Secretary of State is the constitutional adviser of the Crown on all matters relating to India. He inherited generally all the powers and duties which were formerly vested either in the Board of Control, or in the Company, the Directors and the Secret Committee in respect of the government and revenues of India.

The Secretary of State.

Until the Reform Act of 1919 came into force the Secretary of State had the unqualified power to give orders to every officer in India, including the Governor-General, and to superintend, direct and control all acts, operations and concerns relating to the government or revenues of India. In the relations of the Secretary of State with the Governor-General in Council no express statutory change was made, but Parliament ordained through the Joint Select Committee that in practice the conventions governing these relations should be modified; only in exceptional circumstances should he be called upon to intervene in matters of purely Indian interest where the Government and the Legislature of India are in agreement.

Of the wide powers and duties still vested in the Secretary of State, many rest on his personal responsibility; others can be performed only in consultation with his Council, and for some of these the concurrence of a majority of the members of his Council voting at a meeting is required. The Act of 1919 greatly modified the rigidity of the law maintained for sixty years as to the relations of the Secretary of State with his Council, and he has fuller power than in the past to prescribe the manner in which business is to be transacted. Though in practice the Council meets weekly (save in vacation periods) this has ceased to be a statutory requirement, the law now providing that there shall be a meeting at least once in every month.

The India Council.

The number of members of the Council was reduced by the Act to not less than eight and not more than 12, the Secretary of State being free to appoint within those limits. The period of office was reduced from 7 to 5 years, though the Secretary of State may, for special reasons of public advantage to be communicated to Parliament, re-appoint a member for another five years. Half the Council must be persons who have served or resided in India for at least ten years, and who have not left India more than five years before their appointment. The Act restored the old salary of £1,200, with an additional subsistence allowance of £600 for any member who was at the time of appointment domiciled in India. Lord Morley opened the door of the Council to Indians, and since 1917 the number of Indian members has been three.

Associated with the Secretary of State and the India Council is a Secretariat known as the India Office, housed at Whitehall. Appointments to the establishment are made by the Secretary of State in Council, and are subject to the ordinary Home Civil Service rules in all respects.

In the past the whole cost of the India Office has been borne by the revenues of India, except that the Home Government made certain grants and remissions in lieu of a direct contribution amounting to £50,000 a year. The total net cost including pensions has been about £250,000 per annum. In conformity with the spirit of the 1919 Act, an arrangement was made whereby the salary of the Secretary of State is placed on the Home estimates and the cost of the controlling and political functions exercised in Whitehall is also met from British revenues, while agency functions alone are chargeable to Indian revenues.

The High Commissionership.

The financial readjustment has been accompanied by a highly important administrative change provided for by the Act, in the creation of a High Commissioner for India in the United Kingdom with necessary establishments. From October 1st, 1920, the High Commissioner took over control of the purchase of Government Stores in England and the Indian Students Branch, together with the supervision of the work of the Indian Trade Commissioner. The further development of the functions and powers of the High Commissioner have included such agency work as the payment of Civil leave allowances and pensions, the recruitment of technical officers, supervision of I. C. S. and Forest probationers after first appointment, the making of arrangements for officers on deputation or study leave, repatriation of destitute lascars, sale of Government of India publications, etc. The staff of the Stores Department is located at the Depot off the Thames in Belvedere Road, Lambeth. The High Commissioner and the rest of the staff, at 42, 44 and 46, Grosvenor Gardens, S.W. 1, but a new "India House" is to be erected for the High Commissioner in Aldwych to the designs of Sir Herbert Baker at an estimated cost of £300,000.

Parliament has set up since 1920 a Joint Standing Committee on Indian affairs consisting of eleven members of each House. The purpose is to keep Parliament in closer touch with Indian affairs and to refer to the Committee draft rules and also Parliamentary Bills after they have received a second reading.

INDIA OFFICE.

Secretary of State.

The Right Hon. Viscount Peel.

Under-Secretaries of State.

Sir Arthur Hirtzel, K.C.B.
The Rt. Hon. Earl Winterton.

Deputy Under-Secretary of State.

Sir Malcolm Seton, K.C.B.

Assistant Under-Secretaries of State.

Sir Louis Kershaw, K.C.S.I., C.I.E.
S. F. Stewart, C.S.I., C.I.E.

Council.

Frederick Craufurd Goodenough.
Sir William H. H. Vincent, G.C.I.E., K.C.S.I.
General Sir Havelock Hudson, G.C.B., K.C.I.E.
Sir Reginald A. Mant, K.C.I.E., C.S.I.
Sir Muhammad Rafique.
Sir Robert Erskine Holland, K.C.I.E., C.S.I., C.V.O.
Sir Campbell W. Rhodes, C.B.E.
S. N. Mallik, C.I.E.
Dr. R. P. Paranjpye, M.A., B. Sc.
Sir Henry Wheeler, K.C.S.I., K.C.I.E.
Sir W. S. Marris, K.C.S.I., K.C.I.E.
Clerk of the Council, S. F. Stewart, C.S.I., C.I.E.
Deputy Clerk of the Council, F. W. H. Smith.
Private Secretary to the Secretary of State, D. T. Monteath, O.B.E.
Assistant Private Secretaries, J. P. Gibson and G. H. G. M. Cartwright.
Political A.-D.-C. to the Secretary of State, Lieut.-Col. S. B. A. Patterson, C.S.I., C.I.E.
Asst. to Ditto.—O. Gruzelter, M.V.O.
Private Secretary to Sir A. Hirtzel, R. E. Field.
Private Secretary to Earl Winterton, E. P. Donaldson..

Heads of Departments.

SECRETARIES.

Financial, W. Robinson, C.B.E.; C.H. Kisch, C.B.
Public and Judicial, J. E. Ferard, C.B.E.
Military, Field Marshal Sir Claud W. Jacob, G.C.B., K.C.S.I., K.C.M.G.
Personal Assistant.—Col. W. W. Chitty, C.M.G.
Ditto (Joint), S. K. Brown, C.V.O.
Staff Officer attached, Col. J. C. Freeland, C.S.I.
Political and Secret, L. D. Wakely, C.B.
Economic and Overseas, E. J. Turner, C.B.E.
Services and General and Establishment Officer—P. H. Dumbell.
Director-in-Chief of the Indo-European Telegraph, Public Works Department, M. G. Simpson C.S.I.
Asst. to Ditto.—W. Sutherland, C.S.I.
Accountant-General, Sidney Turner, C.B.E., F.I.A. *also Director of Funds and Official Agent to Administrators-General in India.*
RECORD DEPARTMENT.—*Superintendent of Records*, W. T. Ottewill, M.B.E.
Auditor, W. A. Sturdy, C.B.E.

Miscellaneous Appointments.

Government Director of Indian Railway Companies. W. Stantiall, C.I.E.
Asst to Ditto. W. Gauld.
Librarian, Fredk. C. A. Storey, M.A.
Asst. Ditto. H. N. Randle.
Sub-Librarian, J. W. Smallwood.
President of Medical Board for the Examination of Officers of the Indian Services and Adviser to the Secretary of State on Medical matters, Major-General J. B. Smith, C.B., C.I.E.
Members of the Medical Board, Lt.-Col. Sir L. Rogers, C.I.E., F.R.S. Lieut. Col. E.V. Hugo, C.M.G.
Legal Adviser and Solicitor to Secretary of State, Sir Edward Chamier, K.C.I.E.
Asst. Solicitor, F. R. Marten.
Information Officer, E. Haward.
Inspector of Military Equipment and Clothing, Col. H. E. Garstin, D.S.O., R.A. (retd.)
Ordnance Consulting Officer, Col. C. J. D. Freeth.
Asst to Ditto. Capt R. C. Lyons.

HIGH COMMISSIONER'S OFFICE.

(42, Grosvenor Gardens.)

The High Commissioner, Sir A. C. Chatterjee, K.C.I.E.
Secretary, J. C. B. Drake, C.I.E., O.B.E.
Chief Accountancy Officer, G. H. Stoker, O.B.E.
Personal Assistant, G. F. Drayson.
Private Secretary.—W. M. Mather;
General Department: Assistant Secretary, R. E. Montgomery.
Indian Trade Commissioner, H. A. F. Lindsay, C.I.E., C.B.E.
Deputy Ditto, S. N. Gupta, I.C.S.
Assistant Secretary Education Department, T. Quayle, D. Litt. (Lond.).

Store Department Depot at Belvedere Road, Lambeth, S. E. 1.

Director-General. Lieut.-Col. S. S. W. Paddon, C.I.E., C.I.M.E.
Deputy Director, R. R. Howlett.
Controller of Inspection, F. E. Benest, M.I.E.E.

Secretaries of State for India.

	Assumed charge.
Lord Stanley (Earl of Derby.) ..	1858
Sir Charles Wood, Bart. (Viscount Halifax)	1859
Earl de Grey and Ripon (Marquess of Ripon.)	1866
Viscount Cranborne (Marquess of Salisbury)	1866
Sir Stafford Northcote, Bart. (Earl of Iddesleigh.)	1867
Duke of Argyll.	1868
Marquess of Salisbury	1874
Viscount Cranbrook	1878
Marquis of Hartington (Duke of Devonshire)	1880
Earl of Kimberly	1882
Lord Randolph Churchill	1885
Earl of Kimberley, ...	1886
Viscount Cross	1886
Earl of Kimberley, ...	1892
H. H. Fowler (Viscount Wolverhampton)	1894
Lord George F. Hamilton	1895
St. John Brodrick (Viscount Midleton) ..	1903
John Morley (Viscount Morley)	1905
The Earl of Crewe, (Marquess) ..	1911
Austen Chamberlain	1915
E. S. Montagu	1917
Viscount Peel	1922
Lord Olivier	1924
Lord Birkenhead	1924
Viscount Peel	1928

The area enclosed within the boundaries of India is 1,773,168 square miles, with a population of 315,132,537 of people—nearly one-fifth of the human race. But of this total a very large part is not under British Administration. The area covered in the Indian States is 675,267 square miles with a population of seventy millions. The Indian States embrace the widest variety of country and jurisdiction. They vary in size from petty states like Lawa, in Rajputana, with an area of 19 square miles, and the Simla Hill states, which are little more than small holdings, to States like Hyderabad, as large as Italy, with a population of thirteen millions. They include the inhospitable regions of Western Rajputana, Baroda, part of the Garden of India, Mysore, rich in agricultural wealth, and Kashmir, one of the most favoured spots on the face of the globe.

Relations with the Paramount Power.

So diverse are the conditions under which the Indian States were established and came into political relation with the Government of India, that it is impossible even to summarise them. But broadly it may be said that as the British boundaries expanded, the states came under the influence of the Government and the rulers were confirmed in their possessions. To this general policy however there was, for a brief period, an important departure. During the regime of Lord Dalhousie the Government introduced what was called annexation through lapse. That is to say, when there was no direct heir, the Government considered whether public interests would be secured by granting the right of adoption. Through the application of this policy, the states of Satara and of Nagpur fell in to the East India Company, and the kingdom of Oudh was annexed because of the gross misgovernment of its rulers. Then came the Mutiny. It was followed by the transference of the dominions of the East India Company to the Crown, and an irrevocable declaration of policy toward the Indian States. In the historic Proclamation of Queen Victoria it was set out that "We desire no extension of our present territorial possessions; and while we will permit no aggression on our dominions or our rights to be attempted with impunity, we shall allow no encroachments on those of others. We shall respect the rights, dignity and honour of the Native Princes as our own; and we desire that they, as well as our own subjects, should enjoy that prosperity and that social advancement which can only be secured by internal peace and good government." Since the issue of that proclamation there has been no encroachment on the area under Indian rule by the Government of India. On the contrary, the movement has been in the opposite direction. In 1881 the State of Mysore, which had been so long under British administration that the traditions of Native rule were almost forgotten, was restored to the old Hindu ruling house. In 1911 the Maharajah of Benares, the great taluqdar of Oudh, was granted ruling powers over his extensive possessions. On many occasions the Government of India has had to intervene, to prevent gross misgovernment, or to carry on the administration during a long minority; but always with the undeviating intention of restoring the territories as soon as the necessity or intervention passed. Almost all states possess the right of adoption in default of heirs.

Rights of Indian States.

The rights and obligations of the Indian States are thus described by the Imperial Gazetteer. The Chiefs have, without exception, gained protection against dangers from without and a guarantee that the protector will respect their rights as rulers. The Paramount Power acts for them in relation to foreign Powers and other Indian States. The inhabitants of the Indian States are the subjects of their rulers, and except in case of personal jurisdiction over British subjects, these rulers and their subjects are free from the control of the laws of British India. Criminals escaping to an Indian State must be handed over to it by its authorities; they cannot be arrested by the police of British India without the permission of the ruler of the State. The Indian Princes have therefore a suzerain power which acts for them in all external affairs, and at the same time scrupulously respects their internal authority. The suzerain also intervenes when the internal peace of their territories is seriously threatened. Finally they participate in all the benefits which the protecting power obtains by its diplomatic action, or by its administration of its own dominions, and thus secure a share in the commerce, the railways, the ports, and the markets of British India. Except in rare cases, applied to maritime states, they have freedom of trade with British India although they levy their own customs, and their subjects are admitted to most of the public offices of the British Government.

Obligations of Indian States.

On the other hand, the Indian States are under an obligation not to enter into relations with foreign nations or other states; the authority of their rulers has no existence outside their territories. Their subjects outside their dominions become for all intents and purposes British subjects. Where foreign interests are concerned, the Paramount Power must act so that no just cause of offence is given by its subordinate allies. All Indian States alike are under an obligation to refer to the British every question of dispute with other states. Inasmuch as the Indian States have no use for a military establishment other than for police, or display, or for co-operation with the Imperial Government, their military forces, their equipment and armament are prescribed by the Paramount Power. Although old and unaltered treaties declare that the British Government will have no manner of concern with any of a Maharajah's dependents or servants, with respect to whom the Maharajah is absolute, logic and public opinion have endorsed the principle which Lord Canning set forth in his minute of 1860, that the "Government of India is not precluded from stepping in to set right such serious abuses in a Native Government as may threaten any part of the country with anarchy or disturbance, nor from assuming temporary charge of a Native State when there shall be sufficient reason to do so." Of this necessity the Governor-General in Council is the sole judge

subject to the control of Parliament. Where the law of British India confers jurisdiction over British subjects or other specified persons in foreign territory, that power is exercised by the British courts which possess it. The subjects of European Powers and the United States are on the same footing. Where cantonments exist in an Indian State, jurisdiction both over the cantonment and the civil station is exercised by the suzerain power.

Political Officers.

The powers of the British Government are exercised through Political Officers who, as a rule, reside in the states themselves. In the larger states the Government is represented by a Resident, in groups of states by an Agent to the Governor-General, assisted by local Residents or Political Agents. These Officers form the sole channel of communication between the Indian States and the Government of India and its Foreign Department, with the officials of British India and with other Indian States. They are expected to advise and assist the Ruling Chiefs in any administrative or other matters on which they may be consulted. Political Agents are similarly employed in the larger States under the Provincial Governments but in the petty states scattered over British India the duties of the Agent are usually entrusted to the Collector or Commissioner in whose district they lie. All questions relating to the Indian States are under the special supervision of the Supreme Government, and in the personal charge of the Governor-General.

Closer Partnership.

Events have tended gradually to draw the Paramount Power and the Indian States into closer harmony. Special care has been devoted to the education of the sons of Ruling Chiefs, first by the employment of tutors, and afterwards by the establishment of special colleges for the purpose. These are now established at Ajmere, Rajkot, Indore and Lahore. The Imperial Cadet Corps, whose headquarters are at Dehra Dun, imparts military training to the scions of the ruling chiefs and noble families. The spread of higher education has placed at the disposal of the Indian States, the products of the Universities. In these ways there has been a steady rise in the character of the administration of the Indian States, approximating more closely to the British ideal. Most of the Indian States have also come forward to bear their share in the burden of Imperial defence. Following on the spontaneous offer of military assistance when war with Russia appeared to be inevitable over the Penjdeh incident in 1885, the states have raised a portion of their forces up to the standard of the troops in the Indian Army. These were until recently termed Imperial Service Troops; but are now designated Indian State Forces; they belong to the States, they are officered by Indians; but they are inspected by a regular cadre of British officers under the general direction of an Inspector-General. Their numbers are approximately 22,000 men; their armament is the same as that of the Indian Army and they have done good service often under their own Chiefs, on the Frontier and in China, in Somaliland and in the Great War. Secure in the knowledge that the Paramount Power will respect their rights and privileges, the Ruling Chiefs have lost the suspicion which was common when their position was less assured, and the visits of the Prince of Wales in 1875, of the Prince and Princess of Wales in 1905-06, and of the King and Queen in 1911-12 have tended to seal the devotion of the great feudatories to the Crown. The improvement in the standard of native rule has also permitted the Government of India largely to reduce the degree of interference in the internal affairs of the Indian States. The new policy was authoritatively laid down by Lord Minto, the then Viceroy, in a speech at Udaipur in 1909 when he said:—

"Our policy is with rare exceptions, one of non-interference in the internal affairs of the Native States. But in guaranteeing their internal independence and in undertaking their protection against external aggression it naturally follows that the Imperial Government has assumed a certain degree of responsibility for the general soundness of their administration and could not consent to incur the reproach of being an indirect instrument of misrule. There are also certain matters in which it is necessary for the Government of India to safeguard the interests of the community as a whole as well as those of the paramount power, such as railways, telegraphs and other services of an Imperial character. But the relationship of the Supreme Government to the State is one of suzerainty. The foundation stone of the whole system is the recognition of identity of interests between the Imperial Government and Durbars and the minimum of interference with the latter in their own affairs.

HYDERABAD.

The Nizam exercises full sovereignty within his dominions, grants titles and has the power of life and death over his subjects. Before 1919, the Government consisted of a Prime Minister responsible to the Nizam, with Assistant Ministers, but in this year, an Executive Council consisting of seven ordinary and one extraordinary member under a President was established. A legislative Council consisting of 20 members of whom 12 are official, 6 non-official and extraordinary is responsible for making laws. The administration is carried on by a regular system of departments on lines similar to those followed in British India. The state is divided into two divisions—Telingana and Mahratwads—15 Districts and 103 Talukas. Local Boards are constituted in each District and Taluka. The State maintains its own currency which consists of gold and silver coins and a large note issue. The rupee, known as the Osmania Sicca, exchange with the British Indian rupee at an average ratio of 116-10-8 to 100. There is a State postal

service and stamps for internal purposes. The Nizam maintains his own army consisting of 19,523 troops of which 5,876 are classed as regular troops and 12,580 as irregular. In addition to these, there are two battalions of Imperial Service Troops, 1,067 strong.

FINANCE.—Hyderabad State is far the wealthiest of the Indian States, having a revenue in its own currency of over 7½ crores, which is approximately the same as that of the Central Provinces and Bihar and Orissa and double that of any other State. After many vicissitudes, its finances are at present in a prosperous condition and it enjoys a large annual surplus of revenue from which a reserve of 15 crores has been built up. This is being used partly as a sinking fund for the purchase of the State railways and partly for the development of the resources of the State. The budget estimates for the present year show a revenue of 768 lakhs under service heads and an expenditure of 734 lakhs, inclusive of large sums set aside for development, famine insurance and reserve for re-organisation and development. The capital expenditure programme provides for an expenditure of 136 lakhs, which includes 63 lakhs for the large irrigation project known as "Nizam Sagar" and other sanctioned projects and 67 lakhs for the completion of the Kazipet-Bellarshah line, which is the last link in the direct route between Madras and Delhi, and for the construction of feeder lines. The year opened with a cash balance of 495 lakhs which is expected to increase to about 520 lakhs by the end of the year. The Government loans stand at 106½ for short term and 116 for long term issues.

PRODUCTION AND INDUSTRY.—The principal industry of the State is agriculture, which maintains 57 per cent. of the population. The common system of land tenure is ryotwari. About 55 per cent. of the total area is directly administered by the State. The rest consists of private estates of His Exalted the Nizam, which comprise about one-tenth of the total area of the State, and the estates of the Jagirdars and Paigah nobles. The total land revenue is over 3 crores. The principal food crops are millet and rice; the staple money crops cotton, which is grown extensively on the black cotton soils, and oilseeds. Hyderabad is well-known for its Gaorani cotton which is the longest staple indigenous cotton in India. The total area under cotton exceeds 3 million acres. Hyderabad possesses the most southerly of the Indian coal measures and the whole of southern India is dependent on it for such coal as is transported by rail. The chief mine is situated at Singareni, which is not far from Bezwada junction on the Calcutta-Madras line. The chief manufacturing industry is based on the cotton produced in the State. There are five large mills in existence and others are likely to be established, while about one-third of the cloth worn in the Dominions is produced on local hand-looms. There are about 250 ginning and pressing factories in the cotton tracts and also a number of tanneries and flour mills. The Shahabad Cement Co. which has been established at Shahabad on the Great Indian Peninsula Railway line, not far from Wadi, supplies the whole of southern India with cement and has at present an annual output of about 40,000 tons.

TAXATION.—Apart from the land revenue which as stated above brings in about 3 crores, the main sources of taxation are excise and customs. The receipts from each are estimated for the present year at 159 and 132 lakhs respectively. After these come interest on investments (43 lakhs), railways (33 lakhs) and Berar rent (29 lakhs). The customs revenue is derived from an *ad valorem* duty of 5 per cent. on all imports and exports.

COMMUNICATIONS.—One hundred and thirty-seven miles of broad gauge line from Bombay to Madras traverse the State. At Wadi, on this section, the broad gauge system of the Nizam's Guaranteed State Railway takes off and running east through Hyderabad City and Warangal reaches the Calcutta-Madras line at Bezwada, a total length of 330 miles. From Kazipet, near Warangal on this line, a new link to Bellarshah strikes, north. Trains are now running as far as Ramagundam, a distance of nearly 58 miles, and the rest of the line will be opened during the present year. From Secunderabad, the metre gauge Godaveri Valley railway runs north-west for 386 miles to Manmad on the main line of the Great Indian Peninsula Railway to Calcutta. A metre gauge line also runs south from Secunderabad through Mahbubnagar nearly to the border and is now being linked up with Kurnool on the Madras and Southern Mahratta Railway. Thus, with branch lines, there are now 525 miles of broad gauge and 581 of the metre gauge in the State. The Barsi Light Railway also owns a short extension from Kurdwadi on the Bombay-Madras line to Latur in Osmanabad District. The Nizam's Guaranteed State Railway is worked at present by a Company, but H. E. H.'s Government has provided a large proportion of the capital outlay and has the option of purchase at stated intervals, the earliest of which is in the year 1934. The road system is incomplete at present, but is being rapidly extended on a well-considered programme.

EDUCATION.—The Osmania University at Hyderabad imparts instruction in all the faculties through the medium of Urdu, English being taught as a compulsory language and it has one First Grade College and four Intermediate Colleges. The Nizam College at Hyderabad (first grade), is, however, affiliated to the Madras University. In 1924-25 the total number of Educational Institutions rose from 3,556 (1918-19) to 4,001, the number of Primary Schools in particular having been largely increased.

EXECUTIVE COUNCIL:—Raja Rajayan Rajah Sir Kishen Pershad Maharaja Bahadur, Yaminus Saltanath, G.C.I.E., *President*; Nawab Waliud Dowlah Bahadur, *Education, Medical and Military Departments Member*; Nawab Nizamat Jung Bahadur, C.I.E., O.B.E., *Political Member;* Nawab Hydar Nawaz Jung Bahadur, *Finance and Railway Member*; Lt.-Col. Chenivix Trench, C.I.E., O.B.E., *Revenue and Police Member*; Dr. Nawab Sir Amin Jung Bahadur, K.C.I.E., C.S.I., LL.D., *Law Member*; Nawab Aqeel Jung Bahadur, *Public Works Member.*

BRITISH RESIDENT.—The Hon'ble Sir William P. Barton, K.C.I.E., C.S.I.

MYSORE.

The State of Mysore is surrounded on all sides by the Madras Presidency except on the north and the north-west where it is bounded by the districts of Dharwar and North Canara respectively and towards the south-west by Coorg. It is naturally divided into two regions of distinct character ; the hill country (the malnad) on the west and the wide spreading valleys and plains (the maidan) on the east. The State has an area of 29,469 square miles excluding that of the Civil and Military Station of Bangalore and a population of 5,978,892 of whom over 92 per cent. are Hindus. Kannada is the distinctive language of the State.

HISTORY.—The ancient history of the country is varied and interesting. Tradition connects the table land of Mysore with many a legend enshrined in the great Indian epics, the Ramayana and the Mahabharata. Coming down to historical times, the north-eastern portion of the country formed part of Asoka's Empire in the third century B.C. Mysore then came under the rule of the Andhra dynasty. From about the third to the eleventh century A.D. Mysore was ruled by three dynasties, the north-western portion by the Kadambas, the eastern and northern portions by the Pallavas and the central and the southern portions by the Gangas. In the eleventh century, Mysore formed part of Chola dominion, but the Cholas were driven out early in the twelfth century by the Hoysalas, an indigenous dynasty with its capital at Halebid. The Hoysala power came to an end in the early part of the fourteenth century. Mysore was next connected with the Vijayanagar empire. At the end of the fourteenth century Mysore became associated with the present ruling dynasty. At first tributory to the dominant empire of Vijayanagar, the dynasty attained its independence after the downfall of Vijayanagar in 1565. In the latter part of the eighteenth century the real sovereignty passed into the hands of Hyder Ali and then his son, Tippu Sultan. In 1799, on the fall of Seringapatam, the British Government restored the State comprised within its present limits, to the ancient dynasty in the person of Maharaja Sri Krishnaraja Wadayar Bahadur III. Owing to the insurrections that broke out in some parts of the country the management was assumed by the British Government in 1831. In 1881 the State was restored to the dynasty in the person of Sri Chamarajendra Wadayar Bahadur under conditions and stipulations laid down in the Instrument of Transfer. That ruler with the assistance of Mr. (afterwards Sir) K. Seshadri Iyer, K.C.S.I., as Dewan, brought Mysore to a State of great prosperity. He died in 1894, and was succeeded by the present Maharaja Colonel Sir Sri Krishnarajendra Wadayar Bahadur, G.C.S.I., G.B.E., who was installed in 1902. In November 1913 the Instrument of Transfer was replaced by a Treaty which indicates more appropriately the relation subsisting between the British Government and the State of Mysore.

ADMINISTRATION.—The City of Mysore is the Capital of the State, but Bangalore City is the Administrative headquarters. His Highness the Maharaja is the ultimate authority in the State, and the administration is conducted under his control, by the Dewan and three Members of Council. The Chief Court consisting of three Judges is the highest Judicial tribunal in the State. There are two constitutional Assemblies in the State—the Representative Assembly and the Legislative Council. The Representative Assembly was established in 1881 by an executive order of Government, and its powers and functions have been increased from time to time by similar orders of Government. Under the scheme of constitutional developments announced in October 1923 the Representative Assembly has been placed on a statutory basis and given a definite place in the constitution by the promulgation of the Representative Assembly Regulation XVIII of 1923. The franchise has been extended and the disqualification of women on the ground of sex, from exercising the right to vote has been removed. The privilege of moving resolutions on the general principles and policy underlying the budget and on matters of public administration has been granted in addition to those already enjoyed of making representations about wants and grievances and of interpellating Government. The Assembly is also to be consulted on all proposals for the levy of new taxes and on the general principles of all measures of legislation before their introduction into the Legislative Council. Besides the Budget Session (formerly Birthday Session) and the Dasara Session, provision has been made for one or more special sessions of the Assembly to be summoned by Government when the State or public business demands it.

The strength of the Legislative Council has been raised from 30 to 50, of whom 20 are official and 30 are non-official members. The Council which exercised the privileges of interpellation, discussion of the State Budget and the moving of the resolutions on all matters of public administration is, under the reformed constitution, granted the powers of voting on the demands for grants. The Dewan is the Ex-officio President of both the Representative Assembly and the Legislative Council.

The Legislative Council has also a Public Accounts Committee which examines all audit and appropriation reports and brings to the notice of Council all deviations from the wishes of the Council as expressed in its Budget grant.

STANDING COMMITTEES.—With a view to enlarge the opportunities of non-official representatives of the people to influence the every day administration of the State three Standing Committees consisting of Members of the Representative Assembly and the Legislative Council, have been formed, one in connection with Railway, Electrical and P. W. Departments, one in connection with Local Self-Government and the Departments of Medicine, Sanitation and Public Health and the third in connection with Finance and Taxation.

All the important branches of the administration are controlled by separate Heads of Departments. The combatant strength of the Military Force at the end of 1927-28 was 2,268 of which 501 were in the Mysore Lancers, 130 in the

Mysore Horse, 98 in the Transport Corps, and the remaining 1,539 in the Infantry. The total annual cost is about 18 lakhs of rupees. The cost of the Police Administration during 1927-28 was about 16 lakhs.

FINANCES.—The actual total receipts and disbursements charged to Revenue for the past five years together with the revised budget estimate for 1927-28 and budget for 1928-29 were as below :—

Year.	Receipts.	Disbursements.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
1922-23	3,30,70,534	3,26,47,897	+22,637	
1923-24	3,32,57,262	3,32,02,060	+55,202	
1924-25	3,39,62,290	3,39,35,870	+26,420	
1925-26	3,46,36,960	3,46,02,636	+34,324	
1926-27 (Accts.) ..	3,38,69,349	3,47,39,906	....	—8,70,557
1927-28 (revised) ..	3,49,72,000	3,41,21,000	+51,000	
1928-29 (budget). ..	3,55,91,000	3,55,48,000	+43,000	

AGRICULTURE.—Nearly three-fourths of the population are employed in agriculture, and the general system of land tenure is ryotwari. The principal food crops are ragi, rice, jola, millets, gram and sugar cane, and the chief fibres are cotton and sun-hemp. Nearly fifty thousand acres are under mulberry, the silk industry being the most profitable in Mysore next to Gold Mining. A Superintendent of Sericulture has been appointed and the Sericultural Department affiliated to the Industries and Commerce Department. Arrangements are being made for the supply of disease-free seed, and a central and five taluk popular schools have been doing good work. The Department of Agriculture is popularising agriculture on scientific lines by means of demonstrations, investigations, and experiments. There are five Government Agricultural Farms at Hebbal, Babbur, near Hiriyur, Marthur, Nayarapally and the coffee experimental Station at Balehonnur. A live-stock section has been organised which has been taking necessary steps for the improvement of live-stock.

INDUSTRIES AND COMMERCE.—A Department of Industries and Commerce was organised in 1913 with a view to the development of Industries and Commerce in the State. Its main functions are stimulating private enterprise by the offer of technical advice and other assistance for starting new industries, undertaking experimental work for pioneering industries and developing existing industries and serving as a general bureau of information in industrial and commercial matters. The sandal-wood oil factory started on an experimental basis is now working on a commercial scale. A factory is working at Bangalore, and another at Mysore. A large plant at a cost of more than 170 lakhs of rupees has been constructed at Bhadravathi for purposes of manufacturing charcoal, pig-iron, distilling wood-alcohol, and developing subsidiary industries. The works are on the borders of an extensive forest area and practically at the foot of the hills containing rich deposits of iron, manganese and bauxite, and are not far from the Gersoppa Water Falls estimated to be capable of producing 100,000 horse-power of electric energy.

HYDRO—ELECTRIC AND IRRIGATION WORKS.—The river Cauvery in its course through the State, possesses a natural fall of about 380 feet near the island of Sivasamudram, and this fall was harnessed in the year 1902 for the development of electric power, to the extent of about 12,000 H. P. for supplying mainly to the Kolar Gold Mining Companies and incidentally for lighting the cities of Mysore and Bangalore. In course of time, the demand on the power station increased and with a view to protecting the existing supply and augmenting the generation of additional power to meet the growing demands, the "Krishnarajasagara Reservoir" called after the name of the present Maharaja was constructed. The storage from the reservoir besides enabling the generation of electric power up to 46,000 H. P. will also bring under irrigation about 1,20,000 acres of land situated in an area subject to more or less continuous drought. The new Canal Works are now in progress, and the main Canal is named the "Irwin Canal" after the present Viceroy. Full advantage is being taken of the available electric power for small industries and the electrification of towns and lift irrigation.

EDUCATION.—A separate University for Mysore was established on the 1st July 1916. It is of the teaching and residential type composed of the Central, Engineering and Medical Colleges at Bangalore and the Maharaja's and Maharani's Colleges at Mysore, with headquarters at Mysore. The colleges are efficiently equipped and organised and there is a training college for men located at Mysore. The Maharani's College at Mysore is a College for Women.

With the introduction of compulsory education in select centres and the increase in the number of village schools, primary education has during recent years made considerable advance. Schools have been started for imparting instruction in agricultural, commercial, engineering and other technical subjects. There were altogether 8,212 institutions on 31st March 1927. This gives one school to every 3.59 square miles of the area and to every 714 of the population.

Resident in Mysore and Chief Commissioner of Coorg.—The Hon. Mr. G. E. Pears, C.S.I., C.I.E. *(on leave)*

Mr. L. M. Crump, C.I.E., I.C.S., Acting.

Dewan.—Amin-ul-Mulk Mirza Mahomed Ismail, C.I.E., O.B.E.

Members of the Executive Council.—Rajkaryaprasakta Diwan Bahadur, M. N. Krishna Rao, B.A., First Member of Council, C. S. Balasundaram Iyer, B.A., 2nd Member of Council and Mr. K. Mutthan, B.A., Third Member of Council.

BARODA.

The State of Baroda is situated partly in Gujarat and partly in Kathiawar. It is divided into four district blocks: (1) the southern district of Navsari near the mouth of the Tapti river, and mostly surrounded by British territory; (2) central district, North of the Narbada, in which lies Baroda, the capital city; (3) to the North of Ahmedabad, the district of Kadi; and (4) to the West, in the Peninsula of Kathiawar, the district of Amreli, formed of scattered tracts of land. The area of the State is 8,135 square miles; the population is 2,126,522 of whom over four-fifths are Hindus.

History.—The history of the Baroda State as such dates from the break-up of the Mughal Empire. The first Maratha invasion of Gujarat took place in 1705. In later expeditions Pilaji Gaikwar, who may be considered as the founder of the present ruling family, greatly distinguished himself. Songhad was the headquarters till 1766. After 1723 Pilaji regularly levied tribute in Gujarat. His son Damaji finally captured Baroda in 1734, since then it has always been in the hands of the Gaikwars; but Mughal authority in Gujarat did not end until the fall of Ahmedabad in 1753, after which the country was divided between the Gaikwar and the Peshwa. In spite of the fact that Damaji was one of the Maratha chiefs defeated at Panipat by Ahmed Shah, he continued to add to his territory. He died in 1768, leaving the succession in dispute between two rival sons. He was succeeded in turn by his sons Sayaji Rao I. Fattesing Rao, Manaji Rao and Govind Rao. The last died in 1800, and was succeeded by Anand Rao. A period of political instability ensued which was ended in 1802 by the help of the Bombay Government, who established the authority of Anand Rao at Baroda. By a treaty of 1805 between the British Government and Baroda, it was arranged *inter alia* that the foreign policy of the State should be conducted by the British, and that all differences with the Peshwa should be similarly arranged. Baroda was a staunch ally of the British during the wars with Baji Rao Peshwa, the Pindari hordes and Holkar. But from 1820 to 1841, when Sayaji Rao II was Gaikwar, differences arose between the two Governments, which were settled by Sir James Carnac, Governor of Bombay, in 1841. Ganpat Rao succeeded Sayaji Rao in 1847. During his rule, the political supervision of Baroda was transferred to the Supreme Government. His successor Khande Rao, who ascended the *Gadi* in 1856, introduced many reforms. He stood by the British in the Mutiny. He was succeeded by his brother Malhar Rao in 1870. Malhar Rao was deposed in 1875 for "notorious misconduct" and "gross misgovernment," but the suggestion that he had instigated the attempt to poison Col. Phayre, the Resident, was not proved. Sayaji Rao III, a boy of 13 years of age, who was descended from a distant branch of the family, was adopted as heir of Khande Rao in 1875 and is the present Gaikwar. He was invested with full powers in 1881.

Administration.—An executive council consisting of the principal officers of the State carries on the administration, subject to the control of the Maharaja, who is assisted by a Dewan and other officers. A number of departments have been formed, which are presided over by officials corresponding to those in British India. The State is divided into four *prants*, each of which is sub-divided into *Mahals* and *Peta Mahals* of which there are in all 42. Attempts have for some years been made to restore village autonomy, and village panchayats have been formed which form part of a scheme for local self-government. There is a Legislative Department, under a Legal Remembrancer, which is responsible for making laws. There is also a Legislative Council, consisting of nominated and elected members. A High Court at Baroda possesses jurisdiction over the whole of the State and hears all final appeals. From the decisions of the High Court, appeals lie in certain cases, to the Maharaja, who decides them on the advice of the Huzur Nyaya Sabha. The State Army consists of 5,086 Regular forces and 3,806 Irregular forces.

Finance—In 1926-27, the total receipts of the State were Rs. 2,46,61,665 and the disbursements Rs. 2,04,19,363. The principal Revenue heads were:—Land Revenue, Rs. 1,16.64,500; Abkari, Rs. 28,85,548; Opium, Rs. 5,60,735; Railways, Rs. 7,97,345; Interest, Rs. 13,65,153; Tribute from other States, Rs. 2,30,028. British Currency was introduced in 1901.

Production and Industry.—Agriculture and pasture support 63 per cent. of the people. The principal crops are rice, wheat, gram, castor-oil, rapeseed, poppy, cotton, san-hemp, tobacco, sugarcane, maize, and garden crops. The greater part of the State is held on *ryotwari* tenure. The State contains few minerals, except sandstone, which is quarried at Songar, and a variety of other stones which are little worked. There are 73 industrial or commercial concerns in the State registered under the State Companies' Act. There are four Agricultural Banks and 750 Co-operative Societies in the Baroda State.

Communications.—The B. B. & C. I. Railway crosses part of the Navsari and Baroda *prants*, and the Rajputana-Malwa Railway passes through the Kadi *prant*. A system of branch lines has been built by the Baroda Durbar in all the four *prants*, in addition to which the Tapti Valley Railway and the Baroda-Godhra Chord line (B. B. & C. I.) pass through the State. The Railways constructed by the State are about 669 miles in length. Good roads are not numerous.

Education.—The Education Department controls 2,996 institutions of different kinds, in 76 of which English is taught. The Baroda College is affiliated to the Bombay University. There are a number of high schools, technical schools, and schools for special classes, such as the jungle tribes and unclean castes. The State is "in a way pledged to the policy of free and compulsory primary education." It maintains a system of rural and travelling

libraries. Ten per cent. of the population is returned in the census as literate. Total expense on Education is Rs. 32,88,520.

CAPITAL CITY.—Baroda City with the cantonment has a population of 94,712. It contains a public park, a number of fine public buildings, palaces and offices; and it is crowded with Hindu temples. The cantonment is to the north-west of the city and is garrisoned by an infantry battalion of the Indian Army. An Improvement Trust has been formed to work in Baroda City and has set itself an ambitious programme.

RULER.—His Highness Farzand-i-Khas-i-Dowlat-i-Englishia Maharaja Sir Sayaji Rao Gaekwar Sena Khas Khel, Samsher Bahadur, G.C.S.I., G.C.I.E., LL.D., Maharaja of Baroda.

Resident.—Lt.-Col. R. J. C. Burke (*Offg.*).

Dewan.—Rao Bahadur V. T. Krishnamachari, C.I.E.

BALUCHISTAN AGENCY.

In this Agency lies the State of Kalat with its feudatory State of Las Bela.

Kalat is bounded on the North by the Chagai district, on the East by Sindh and the Marri-Bugti tribal territories, on the South by the Arabian Sea and on the West by Persia.

The State includes the tribal territories of the Chiefs of the Brahui Confederacy of which the Khan of Kalat is Head. The divisions of the State are, Sarawan or the Highlands, Jhalawan or the Lowlands, Kachhi, Makran, the khanate of Kharan and the feudatory State of Las Bela. The inhabitants are for the most part Brahuis or Baloch, both being Muhammadans of the Sunni sect. The area of Kalat with Las Bela is 80,410 sq. miles. The country is sparsely inhabited, the total population being about 379,000.

The relations of Kalat with the British Government are governed by the treaties of 1854 and 1876, by the latter of which the independence of Kalat was recognized, while the Khan agreed to act in subordinate co-operation with the British Government. There are also agreements with Kalat in connection with the construction of the Indo-European telegraph line, the cession of jurisdiction on the railways and in the Bolan Pass, and the permanent leases of Quetta, Nushki and Nasirabad.

The Khan is assisted in the administration of the State by a Wazir-i-Azam, at present a retired officer of the British service. The Governor-General's Agent in Baluchistan conducts the relations between the Government of India and the Khan, and exercises general political supervision over the State. The revenue of the State is about Rs. 17,60,000, out of which the Khan retains a civil list of Rs. 3,50,000 per annum. The present Khan is His Highness Beglar Begi Sir Mir Mahmud Khan of Kalat, G.C.I.E. He was born in 1864.

Las Bela is a small State under the suzerainty of Kalat. The Hab river for the Southern part of its course forms the Eastern boundary with Sind, and the greater part of the State consists of the valley and the delta of the Purali river. Area 7,132 square miles; population 50,696, chiefly Sunni Muhammadans. The estimated average revenue is about Rs. 3,80,000. The Chief of Las Bela, known as the Jam, is bound by agreement with the British Government to conduct the administration of his State in accordance with the advice of the Governor-General's Agent. This control is exercised through the Political Agent in Kalat. The Jam also employs an approved Wazir, to whose advice he is subject and who assists him generally in the transaction of State business.

Agent to the Governor-General for Baluchistan.—Hon'ble Lt.-Col. H. B. St. John, C.I.E., C.B.E.

RAJPUTANA AGENCY.

Rajputana is the name of a great territorial circle with a total area of about 131,698 square miles, which includes 19 Indian States, one chiefship, and the small British district of Ajmer-Merwara. It is bounded on the west by Sind, on the north-west by the Punjab State of Bahawalpur, on the north and north-east by the Punjab, on the east by the United Provinces and Gwalior, while the southern boundary runs across the central region of India in an irregular zigzag line. Of the Indian States and Chiefship 17 are Rajput, 2 (Bharatpur and Dholpur) are Jat, and one (Tonk) is Mahomedan. The chief administrative control of the British district is vested *ex-officio* in the political officer, who holds the post of Governor-General's Agent for the supervision of the relations between the several Indian States of Rajputana and the Government of India. For administrative purposes they are divided into the following groups:—Bikaner and Sirohi in direct relations with the Agent to the Governor-General; Eastern Rajputana Agency States (Bharatpur, Dholpur Karnali, Alwar and Kotah), Haraot and Tonk Agency, 4 States (Bundi, Jhalawar, Shahapura and Tonk); Jaipur Residency, 2 States (principal State, Jaipur); Mewar Residency, and Southern Rajputana States Agency, 3 States (principal State Banswara) and the Kushalgarh Chiefship; Western Rajputana States Residency, 2 States (principal State, Marwar).

The Aravalli Hills intersect the country almost from end to end. The tract to the north-west of the hills is, as a whole, sandy, ill-watered and unproductive, but improves gradually from being a mere desert in the far west to comparatively fertile lands to the north-east. To the south-east on the Aravalli Hills lie higher and more fertile regions which contain extensive hill ranges and which are traversed by considerable rivers.

COMMUNICATIONS.—The total length of railways in Rajputana is 1,576 miles, of which 73 are the property of the British Government The B. B. & C. I. (Metre-gauge) (Government)

runs from Ahmedabad to Bandikui and from there branches to Agra and Delhi. Of the Indian State railways the most important are the Jodhpur and Bikaner lines from Marwar Junction to Hyderabad (Sind) and to Bikaner.

INHABITANTS.—Over 50 per cent. of the population are engaged in some form of agriculture; about 20 per cent. of the total population are maintained by the preparation and supply of material substances; personal and domestic service provides employment for about 5 per cent. and commerce for 2½ per cent. of the population. The principal language is Rajasthani. Among castes and tribes, the most numerous are the Brahmans, Jats, Mahajans, Chamars, Rajputs, Minas, Gujars, Bhils, Malis and Balais. The Rajputs are, of course, the aristocracy of the country, and as such hold the land to a very large extent, either as receivers of rent or as cultivators. By reason of their position as integral families of pure descent, as a landed nobility, and as the kinsmen of ruling chiefs, they are also the aristocracy of India; and their social prestige may be measured by observing that there is hardly a tribe or clan (as distinguished from a caste) in India which does not claim descent from, or irregular connection with, one of these Rajput stocks.

The population and area of the States are as follows:—

Name of State.	Area in square miles.	Population in 1921.
In direct Political relations with A. G. G.—		
Bikaner	23,315	659,685
Sirohi	1,958	186,639
Mewar Residency—		
Udaipur	12,756	1,380,063
Southern Rajputana States Agency—		
Banswara	1,606	190,362
Dungarpur	1,447	189,272
Partabgarh	886	67,110
Kushalgarh .. .. *(Chiefship)*	340	29,162
Western State Residency—		
Jodhpur	34,963	1,841,642
Jaisalmer	16,062	67,652
Jaipur Residency—		
Jaipur	15,579	2,338,802
Kishangarh	858	77,734
Lawa	19	2,262
Haraoti-Tonk Agency—		
Bundi	2,220	187,068
Tonk	2,553	287,898
Jhalawar	810	96,182
Shahpura	405	48,130
Eastern States Agency—		
Bharatpur	1,983	496,437
Dholpur	1,155	229,734
Karauli	1,242	133,730
Alwar	3,141	701,154
Kotah	5,684	630,060

Udaipur State (also called Mewar) was founded in about 646 A.D. The capital city is Udaipur, which is beautifully situated on the slope of a low ridge, the summit of which is crowned by His Highness the Maharana's palaces, and to the north and west, houses extend to the banks of a beautiful piece of water known as the Pichola Lake in the middle of which stand two island palaces. It is situated near the terminus of the Udaipur-Chitor Railway, 697 miles north of Bombay. The present ruler is His Highness Maharajadhiraj Maharana Sir Fateh Singhji Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., who was born in 1849 and succeeded in 1884. He is the head of the Seesodia Rajputs and is the Premier Chief. The administration is carried on by the Maharana, assisted by Shriman Maharaj Kumar Sir Bhopal Singhji Bahadur, K.C.I.E., to whom His Highness has delegated certain powers. The revenue and expenditure of the State are now about 45 and 43 lakhs a year respectively. Udaipur is to be rich in minerals which are little worked. Its archæological remains are numerous, and stone inscriptions dating from the third century have been found.

Banswara State is the southernmost State of Rajputana within the Political Agency of the Southern Rajputana States. The area of the State is 1,946 square miles and the population 2,19,824 souls. It is thus in regard to size eleventh among the States of Rajputana. Banswara with Dungarpur originally formed a country known as Bagar, which was, from the beginning of the thirteenth century until about the year 1529, held by certain Rajput Rulers of the Ghelot or Shishodiya clan, who claimed descent from an elder branch of the family now ruling in Udaipur. After the death of Rawal Udai Singhji, the ruler of Bagar, about 1529, his territory was divided between his two sons, Prithwi Singhji and Jagmal Singhji, and the descendants of the two families are now respectively the Rulers of Dungarpur and Banswara. Where the town of Banswara now stands there was a large Bhil pal or colony under a powerful Bhil Chieftain, named Wasna, who was defeated and slain by Jagmal Singhji about 1530. The name of Banswara is by tradition said to be a corruption of Wasnawara or the country of Wasna. Others assert that the word means the country (wara) of bamboos (bans). Nearly three centuries after its foundation by Maharawal Jagmal Singhji, Maharawal Bijai Singhji, anxious to get rid of the supremacy of the Mahrattas, offered to become a tributary to the British Government. In 1818, a definite treaty was made with his successor, Maharawal Umed Singhji. Banswara has been described as the most beautiful portion of Rajputana; it looks at its best just after the rains. The principal rivers are the Mahi, the Anas, the Eran, the Chap and the Haran.

The present Ruler is His Highness Rayan Rai Maharawalji Sahib Shree Pirthi Singhji Bahadur, who was born on July 15, 1888, and is the 21st in descent from Maharawal Jagmal Singhji. His Highness was educated in the Mayo College, and succeeded his father in 1914. His Highness is entitled to a salute of 15 guns. The State is ruled by the Maharawal with the assistance of the Diwan and the Judicial and the Legislative Councils, of which the Diwan is the President. The revenue of the State is about 9 lakhs and the expenditure is about the same.

Diwan:—Kothari Zalim Singhji, B.A.

Dungarpur State, with Banswara, formerly comprised the country called the Bagar. It was invaded by the Mahrattas in 1818. As in other States inhabited by hill tribes, it became necessary at an early period of British supremacy to employ a military force to coerce the Bhils. The State represents the *Gadi* of the eldest branch of the Sisodias and dates its separate existence from about the close of the 12th Century. Samant Singh, King of Chitor, when driven away by Kirtipal of Jalor, fled to Bagad and killed Chowrasimal, Chief of Baroda, and founded the State of Dungarpur. The present Chief is His Highness Rai Rayan Maharawal Shri Lakshman Singhji born on 7th March 1908, succeeded on 15th November 1918 and assumed charge of the administration on the 16th February 1928. No railway line crosses the territory, the nearest railway station, Udaipur, being 65 miles distant. Revenue about 6½ lakhs.

Partabgarh State, also called the Kanthal, was founded in the sixteenth century by a descendant of Rana Mokal of Mewar. The town of Partabgarh was founded in 1698 by Partab Singh. In the time of Jaswant Singh (1775-1844), the country was overrun by the Marathas, and the Maharawat only saved his State by agreeing to pay Holkar a tribute of *Salim Shahi* Rs. 72,700 (which then being coined in the State Mint was legal tender throughout the surrounding Native States), in lieu of Rs. 15,000 formerly paid to Delhi. The first connexion of the State with the British Government was formed in 1804; but the treaty then entered into was subsequently cancelled by Lord Cornwallis, and a fresh treaty by which the State was taken under protection was made in 1818. The tribute to Holkar is paid through the British Government, and in 1904 was converted to Rs. 36,350 British currency. The present ruler is His Highness Maharawat Sir Raghunath Singh Bahadur, K.C.I.E., who was born in 1859 and succeeded in 1890. The State is governed by the Maharawat with the help of the Dewan, and, in judicial matters, of a Committee of eleven members styled the Raj Sabha or State Council. Revenue about 6 lakhs; expenditure nearly 5 lakhs. The financial administration is under the direct supervision of the State.

Jodhpur State, the largest in Rajputana also called Marwar, consists largely of sandy country. The Maharaja of Jodhpur is the head of the Rathor Clan of Rajputs and claims descent from Rama, the deified king of Ayodhya. The earliest known king of the clan lived in the sixth century from which time onwards their history is fairly clear. After the breaking up of their Kingdom at Kanauj they founded this State about 1212 and the foundations of Jodhpur City were laid in 1459 by Rao Jodha. The State entered into a treaty of alliance with the British Government in 1818. Jaswant Singh succeeded in 1873 and reformed the State. His son Sardar Singh was invested with powers in 1898, the minority rule having been carried on by his uncle Maharaja Sir Pratab Singh. He died in 1911 and was succeeded by his eldest son Maharaja Sumer Singh Bahadur, who was then 14 years of age. The administration of the State was carried on by a Council of Regency, presided over by General Maharaja Sir Pratab Singh. On the outbreak of the European War both the Maharaja and the Regent offered their services and were allowed to proceed to the Front. The young Maharaja was, for his services at the Front, honoured with an Honorary Majority in the British Army and K.B.E. and was invested with full ruling powers in 1916 and died on 3rd October 1918. He was succeeded by his younger brother Major Maharaja Sir Umed Singhji Saheb Bahadur, K.C.S.I., K.C.V.O., who, on attaining majority, has taken over charge of the administration from the 27th January 1923. Revenue Rs. 1,20,00,000; expenditure Rs. 100 lakhs.

Jaisalmer State is one of the largest States in Rajputana and covers an area of 16,062 square miles. The Rulers of Jaisalmer belong to the Jadon clan and are the direct descendants of Krishna. Jaisalmer City was founded in 1156, and the State entered into an alliance of perpetual friendship with the British Government in 1818. In 1844 after the British conquest of Sind the forts of Shahgarh, Garsia and Ghotaru which had formerly belonged to Jaisalmer were restored to the State. The present Ruling Prince is His Highness Maharajadhiraja Maharawal Shri Sir Jawahar Singhji Bahadur, K.C.S.I. Revenue about four lakhs.

Sirohi State is much broken up by hills of which the main feature is Mount Abu, 5,650 feet. The Chiefs of Sirohi are Deora Rajputs, a branch of the famous Chauhan clan which furnished the last Hindu kings of Delhi. The present capital of Sirohi was built in 1425. The city suffered in the eighteenth century from the wars with Jodhpur and the depredations of wild Mina tribes. Jodhpur claimed suzerainty over Sirohi but this was disallowed and British protection was granted in 1823. The present ruler is His Highness Maharajadhiraj Maharao Shri Sir Sarup Ram Singh Bahadur, K.C.S.I. The State is ruled by the Maharao with the assistance of Ministers and other officials. Revenue about 10½ lakhs; expenditure 10 lakhs.

Jaipur is the fourth largest State in Rajputana. It consists for the most part of level and open country. It was known to the ancients as Matsya Desh, and was the kingdom of the King Virata mentioned in the Mahabharata, in whose court, the five Pandava brothers during their last period of exile resided. Bhairat in the Jaipur State has been identified.

The Maharaja of Jaipur is the head of the Kuchawa clan of Rajputs, which claims descent from Kush, son of Rama, King of Ayodhya, the famous hero of the famous epic poem, the Ramayana. This dynasty in Eastern Rajputana dates as far back as ninth century A. D. Dulha Rai, one of its most early rulers, made Amber the capital of the State in 1037 A. D. About the end of 12th century one of the rulers Pajun at the head of the army of Prithvi Raj, Emperor of Delhi, defeated Shahabuddin Ghori in the Khyber Pass and pursued him as far as Ghazni. Prithvi Raj had given his sister in marriage to him. History of India records several distinguished rulers of Jaipur from

amongst whom the following require particular mention. Man Singh, 1590-1615. He was a victorious general, intrepid commander and tactful administrator, whose fame had spread throughout the country. During most troublous times, he maintained Imperial authority in Kabul and was the brilliant character of Akber'stime. Maharaja Sawai Jai Singh II (1700—44) was the first town planned in India. He removed the capital of the State to Jaipur, so named after him. During his time, the State acquired great power and fame. He was a great mathematician and scientist of his age, and is famous for his astronomical observatories which he built at several important centres in India. His court was visited by foreign astronomers. Maharaja Sawai Ram Singh, 1835-1880. He was one of the most enlightened princes in India at that time. He encouraged art and learning. He embellished the city in various ways and improved the administration and material condition of the people. Maharaja Sawai Madho Singh II, 1880-1922. He was a very wise and intelligent ruler who followed in the foot-steps of his father. He maintained and steadily improved all the useful measures initiated by the late Maharaja. His administration is characterized by great liberality, catholicity and a broad outlook on affairs. His deep religious devotion and piety and unrivalled generosity and genuine and active sympathy are well known. His staunch loyalty and maintenance of the traditions of his house raised him in the estimation of the paramount power. He passed away after a long reign of 41 years. His late Highness' donations and subscriptions to works of charity are enormous and too numerous to detail. His Highness the present Maharaja Sawai Man Singh II Bahadur was born on 21st August 1911. He was adopted by His late Highness on 24th March 1921. He is a scion of the Rajawat House of Isarda, and ascended the gadi on the 7th September 1922, and was married to the sister of the present Maharajah of Jodhpur on the 30th January 1924. He is studying at the Mayo College and promises to be an ideal ruler having given abundant evidence already of the keen and sympathetic interest he takes in all that concerns the welfare of his people and mankind in general.

During the minority of the present Ruling Prince, the administration is carried on by a Council of State. A Chief Court of Judicature was established in 1924. The army consists of Cavalry, Infantry, Transport and Artillery. The normal revenue is about one crore and twenty five lakhs and expenditure about one crore and twenty lakhs. According to the Census of 1921, the population of the State is 23,38,802. In area, it is 15,579 Sq. miles.

Khetri stretches from 75-12″ to 76′-20″ East longitude and from 27′-35″ to 28′-28″ North Latitude. The area is about 800 square miles excluding that of Panchpana villages in which Khetri has shares varying from 2 annas 6 pies to 13 annas 4 pies. The State has a population of 1,28,377 and an income of 10 lakhs.

Raja Sardar Singh Bahadur of Khetri is a Sheikhawat and a descendant of Sardul Singhji who was descended from Bhoj Raj, son of Raja Rai Sal of Khandela. Sardul Singhji conquered the northern part of the territory known as Sheikhawati from the various Nawabs and a portion of this territory is now held by Khetri under the sovereignty of the Jaipur Darbar. In addition a portion of territory known as Babai is held in istimrar jagir granted by the Jipur Darbar. The Pargana of Kotpuli was granted in istimrar jagir subject to the annual payment of Rs. 20,000 by the East India Company to Raja Abhay Singhji in 1803 in recognition of military assistance given by Khetri to the Company. This jagir was in 1806 converted into a perpetual grant in recognition of the gallant services of the Khetri contingent in the disastrous retreat of Col. Monson when they were cut down to a man in an attempt to save the life of Lieut. Lucan.

The present Raja who is a minor aged nine years succeeded his father Raja Amar Singh Bahadur on 6th May 1927. The administration of the State is carried on by G. A. Carroll, the State being under the management of the Jaipur Durbar. He is designated Superintendent of Khetri Thikana (Thikana is a word locally used for estate.)

Kishangarh State is in the centre of Rajputana and consists practically of two narrow strips of land separated from each other with an area of 858 square miles (population 77,734), the northern mostly sandy, the southern generally flat and fertile. The Ruling Princes of Kishangarh belong to the Rathor clan of Rajputs and are descended from Maharaja Kishan Singh (second son of Maharaja Udai Singh of Jodhpur) who founded the town of Kishangarh in 1611. The present ruler is His Highness Umdae Rajhai Buland Makan Maharajah Dhiraj Dikshit Yagnarain Singh Bahadur. He was born on the 26th January, 1896, and was educated at the Mayo College, Ajmer, where he passed the Diploma Examination. He was married to the sister of Raja Bahadur Maksudangarh in May, 1915, and a son Maharajkumar Yatendra Singhji was born of this marriage on the 5th May, 1916. He went to England and travelled on the Continent with His Late Highness in 1921. On the demise of His Late Highness on 25th September 1926, he succeeded to the Gaddi on the 24th November, 1926. He administers the State with the help of a Council. Revenue about 9 lakhs and expenditure 8 lakhs.

Lawa State, or Chief of Rajputana is a separate chiefship under the protection of the British Government and independent of any Native States. It formerly belonged to Jaipur and then became part of the State of Tonk. In 1867, the Nawab of Tonk murdered the Thakur's uncle and his followers, and Lawa was then raised to its present State. The Thakurs of Lawa belonged to the Naruka sect of the Kachwaha Rajputs. The present Thakur, Raghubir Singh, was born in 1899, and succeeded to the estate in January 1923. Revenue about Rs. 20,000.

Bundi State is a mountainous territory in the south-east of Rajputana. The Ruler of Bundi is the head of the Hara sect of the great clan of Chauhan Rajputs and the country occupied by this sect has for the last five or six centuries been known as Haraoti. The State was founded in the early part of the thirteenth cen-

tury and constant feuds with Mewar and Malwa followed. It threw in its lot with the Mahomedan emperors in the sixteenth century. In later times it was constantly ravaged by the Marathas and Pindaries and came under British protection in 1818 at which time it was paying tribute to Holkar. The present ruler of the State is His Highness Maharao Raja Shri Ishwari Singhji Saheb Bahadur. He was born on 8th March 1893 and succeeded to the Gadi on 8th August 1927. His Highness is entitled to a Salute of 17 guns. Revenue about 12 lakhs: Expenditure nearly the same.

Tonk State.—Partly in Rajputana and partly in Central India, consists of six Parganas separated from one another. The ruling family belongs to the Salarzai Clan of the Bunerwal Afghan tribe. The founder of the State was Nawab Mahomed Amir Khan Bahadur, General of Holkar's Army from 1798-1806. Holkar bestowed grants of land on him in Rajputana and Central India and the land so granted him was ratified by the peace made between the British and the Chiefs of Rajputana in 1817 and was consolidated into the present State. His grandson was deposed. The present ruler of the State is His Highness Amirud-Doula Wazirul-Mulk Nawab Sir Hafiz Muhammad Ibrahim Ali Khan Bahadur, G.C.S.I., G.C.I.E., ascended the masnad in 1866. The administration is conducted by the Nawab assisted by a Council of four members. *viz*:—(1) Captain W. F. Webb, I. A., Revenue Member and Vice-President; (2) Captain N. D. O. Toole, Judicial Member: (3) Khan Bahadur Sahibzada Muhammad Ishaque Khan, Home Member; and (4) Sahibzada Abdul Wahab Khan, Financial Member. Revenue Rs. 23,65,786. Expenditure Rs. 23,81,180.

Shahpura State.—The ruling family belongs to the Seesodia Clan of Rajputs. The State came into existence about 1629 when the Parganah of Phulia was granted by the Mughal Emperor Shah-i-Jehan to Maharaj Sujan Singh, son of Maharaj Surajmal, the second son of Maharana Amar Singh of Udaipur. Later on Raja Ran Singhji received the paraganah of Kachhola from the Maharana of Udaipur and was recognised as a great noble of the Mewar State.

The present Ruler is Raja Dhiraja Sir Nahar Singhji, K.C.I.E. The State enjoys permanent honour of 9 guns salute.

Bharatpur State.—Consists largely of an immense alluvial plain, watered by the Banganga and other rivers.

The present ruling family of Bharatpur are Jats, of the Sinsinwar clan who trace their pedigree to the eleventh century. The family derives its name from its old village Sinsini. Bharatpur was the first State in Rajputana that made alliance with the British Government in 1803. It helped Lord Lake with 5,000 horse in his conquest of Agra and battle of Laswari wherein the Maratha power was entirely broken and received 5 districts as reward for the service. In 1804, however, Bharatpur sided with Jaswant Rao Holkar against the British Government which resulted in a war. Peace was re-established in 1805 under a treaty of alliance and it continues in force. The Gadi being usurped by Darjan Sal in 1825, the British Government took up the cause of the rightful heir Maharaja Balwant Singh Shaib. Bharatpur was besieged by Lord Combermere, and as the faithful subjects of the State also made common cause with the British Army the usurper was quickly disposed of, and Maharaja Balwant Singh, the rightful heir to the Throne, came into his own. Bharatpur also rendered valuable service to the British Government during the Mutiny. During the great War the Bharatpur Durbar gave valuable help to the Imperial Government. The Bharatpur Imperial Service Infantry served in East Africa and the Mule Transport Corps served in all theatres of war except Africa. The following are among the most important contributions made by the State during the great war: (1) reinforcement sent to E. Africa for the Imperial Service Infantry, 714 rank and file, and 64 followers; (2) reinforcements for the Imperial Service Transport Corps, 430 rank and file and 64 followers; (3) State subscriptions to war loans 20 lakhs; (4) State subscriptions to Imperial Indian Relief Funds, Soldiers' Comfort Fund, Aeroplane Fleet Fund, Lord Kitchener's Memorial Fund, St. John's Ambulance, Serbian Relief Fund, and Red Cross, 2 lakhs; (5) public subscriptions to various war funds Rs. 26,000 and (6) public subscriptions to war bonds Rs. 69,000. Immediately upon their return from Europe the Bharatpur Transport Corps went to the North-West Frontier, and remained on active service there during the Afghan War. The Corps returned to Bharatpur at the conclusion of peace in February 1920. The present Chief is Colonel His Highness Shri Maharaja Brijendra Sawai Sir Kishen Singh Bahadur. Bahadur Jung, K.C.S.I. who was born in 1899 and succeeded in the following year his father Maharaja Ram Singh, who was deposed. Revedue 35 lakhs.

Dholpur State.—The family of the ruling Chiefs of Dholpur belongs to the Bamrolian Jats, the adopted home of one of their ancestors. The family takes the name of Bamrolia about the year 1367. They next migrated to Gwalior, where they took the part of the Rajputs in their struggles against the Emperor's Officers. Eventually the Bamrolia Jats settled near Gohad and in 1505 Surjan Deo assumed the title of Rana of Gohad. After the overthrow of the Mahrattas at Panipat, Rana Bhim Singh in 1761 possessed himself of the fortress of Gwalior but lost it six years later. In order to bar the encroachments of the Mahrattas, a treaty was made with the Rana in 1779 by the British Government under Warren Hastings, and the joint forces of the contracting parties re-took Gwalior. In the treaty of the 13th October 1781 between the British Government and Scindia, it was stipulated that so long as the Maharaj Rana observes his treaty with the English, Scindia should not interfere with his territories. The possession of Gohad however led to disputes between the British and Scindia, and in 1805 the Governor-General transferred Gwalior and Gohad to Scindia, and that of Dholpur, Bari, Baseri, Sepau and Rajakhera to Maharaj Rana Kirat Singh. Maharaj Rana Kirat Singh died in 1836 and was succeeded by his son Maharaj Rana Bhagwant Singh on whose death in 1870 his grandson, the late Chief Maharaj Rana Nehal Singh, succeeded to the Gadi. Major His

Highness Rais-ud-Daula Sipahdar-ul-Mulk Saramad Rajhai Hind Maharajadhiraj Sri Sawai Maharaj Rana Sir Udai Bhan Singh Lokindra Bahadur Diler Jang Jai Deo, K.C.S.I., K.C.V.O., the present ruler, is the second son of Maharaj Rana Nehal Singh and was born on the 12th February 1893. On the death of his brother Maharaj Rana Ram Singh His Highness succeeded to the gadi on March 1911. He was educated at the Mayo College, Ajmer, where he passed the Diploma Examination and won several prizes. After a short course of training in the Imperial Cadet Corps at Dehra Dun, His Highness went on a tour to Europe in 1912 and was invested with full ruling powers on the 9th October 1913.

By clan and family the Maharaj Rana is connected with the Jat Chiefs of Patiala, Jhind, Nabha and Bharatpur. His mother was the second sister of late Shahzada Basdeo Singh Sahib Bahadur of the family of Maharaj Ranjit Singh of Lahore. His Highness is married to the daughter of the Sardar of Badrukha in the Jhind State.

Karauli State.—A State in Rajputana under the Political control of the Political Agent, Eastern Rajputana States Agency, lying between 26° and 27° north latitude and 76° 30′ and 77° 30′ east longitude. Area, 1,242 square miles. The river Chambal forms the south-eastern boundary of the State, dividing it from Gwalior (Scindhia's Territory), on the south-west it is bounded by Jaipur; and on the north-east by the States of Bharatpur, Jaipur and Dholpur. The State pays no tribute to Government. Languages spoken Hindi and Urdu.

Ruler—His Highness Maharajadhiraj Maharaja Sir Bhom Pal, Deo Bahadur, Yadukul Chandra Bhal, Chief Member, State Council, Rao Saheb Pandit Shanker Nath Sharma.

Kotah State belongs to the Hara section, the clan of Chauhan Rajputs, and the early history of their house is, up to the 17th century, identical with that of the Bundi family from which they are an offshoot. Its existence as a separate State dates from 1625. It came under British protection in 1817. The present ruler is H. H. Lieut.-Colonel Maharao Sir Umed Singh Bahadur, G.C.S.I., G.C.I.E., G.B.E., who was born in 1873 and invested with full powers in 1896. In administration he is assisted by two members, Rai Bahadur Pandit Bishwambhar Nath, M.A., and Major-General Onkarsingh, C.I.E. The most important event of his rule has been the restoration, on the deposition of the late Chief of the Jhalawar State, of 15 out of the 17 districts which had been ceded in 1838 to form that principality. Revenue 53 lakhs: Expenditure 48 lakhs.

Jhalawar State consists of two separate tracts in the south-east of Rajputana. The ruling family belongs to the Jhala clan of Rajputs. The last ruler was deposed for misgovernment in 1896, part of the State was reassigned to Kotah, and Kunwar Bhawani Singh, son of Thakur Chhatra, salji of Fatehpur, was selected by Government to be the Ruler of the new State. He was born in 1874 and was created a K.C.S.I. in 1908. He is assisted in administration by a Cabinet, has established many useful institutions, and has done much to extend education in the State. Revenue 8 lakhs.

The Bikaner State in point of area is the 7th largest of all the Indian States and the second largest in Rajputana. The population of the State is 659,685 of whom 84 per cent. are Hindus, 11 per cent. Mohommadans and 1·5 per cent. Jains. The Capital City of Bikaner, with its population including the suburbs of 69,410, is the 3rd City in Rajputana.

The northern portion of the State consists of level loam land, whilst the remainder is for the most part sandy and undulating. The average rainfall is about 12 inches. The water level over most of the State is from 150 feet to 300 feet deep.

The Reigning Family of Bikaner is of the Rathore clan of Rajputs, and the State was founded in 1465 A.D. by Rao Bikaji, son of Rao Jodhaji, Ruler of Marwar (Jodhpur), and after him both the Capital and the State are named. Rai Singhji, the first to receive the title of Rajah, was "one of Akbar's most distinguished Generals" and it was during his reign that the present Fort of Bikaner was built in 1593. The title of Maharajah was conferred on Rajah Anup Singhji by the Mughal Emperor in 1687 in recognition of his distinguished services in the capture of Golconda. The conspicuous services of Maharajah Sardar Singhji who in the Indian Mutiny of 1857 personally led his troops to co-operate with the British forces in the field on the outbreak of the Mutiny was acknowledged by the Government of India by the transfer of the Sub-Tehsil of Tibi, consisting of 41 villages from the adjoining Sirsa Tehsil in the Punjab to the Bikaner State.

The present Ruler, Major-General His Highness Maharajadhiraj Raj Rajeshwar Narendra Shiromani Maharaja Sri Sir Ganga Singhji Bahadur, G.G.S.I., G.C.I.E., G.C.V.O., G.B.E., K.C.B., A.D.C., LL.D., is the 21st of a long line of distinguished rulers renowned for their bravery and statesmanship. He was born on the 3rd October 1880, and assumed full ruling powers in December, 1898. He was awarded the first class Kaisar-i-Hind Medal for the active part he took in relieving the famine of 1899-1900, and soon after he went on active service to China in connection with the China War of 1900-1901 in command of his famous Ganga Risala and was mentioned in despatches and received the China Medal and K.C.I.E. The State Forces consist of the Camel Corps, known as 'Ganga Risala,' whose sanctioned strength is 465 strong, an Infantry Regiment 443 strong, a Regiment of Cavalry 342 strong, including Body Guard, a Battery of Artillery (6 guns), and Camel Battery 60. At the outbreak of the Great War in 1914, His Highness immediately placed the services of himself and his State forces and all the resources of the State at the disposal of His Imperial Majesty the King-Emperor, and the Ganga Risala reinforced by the Infantry Regiment, which became incorporated in the Camel Corps in the field, rendered very valuable services in Egypt and Palestine. An extra force was also raised for internal security. His Highness personally went on active service in August 1914 and enjoys the honour of having fought both in France and Egypt, and thus has the distinction of having fought for the British Crown on three Continents, *viz.*, Asia, Europe and Africa. He was mentioned in despatches both

in Egypt and France. His Highness also played a very conspicuous political part during the period of the War when he went twice to Europe as the Representative of the Princes of India, once in 1917 to attend the meetings of the Imperia War Cabinet and Conference, and again in 1918-19 to attend the Peace Conference where he was one of the signatories to the treaty of Versailles.

His Highness enjoys a salute of 19 guns (personal) whilst the permanent local salute of the State is also 19. His Highness has also had the honour of being elected the first Chancellor of the Chamber of Princes, an office which he filled most creditably for 5 years till 1925.

His Highness is assisted in the administration of the State by the State Council consisting of 5 Ministers under a Prime Minister and Chief Councillor in the person of Sir Manubhai N. Mehta, Kt., C.S.I., M.A., LL.B., formerly the Dewan of the Baroda State. A Legislative Assembly was inaugurated in 1913, and consists of 45 Members, 18 out of whom are elected Members, and which meets twice a year.

The revenues of the State are over ninety lakhs of rupees and the State owns a large Railway system, the total mileage being 619·15. Several projects for its extension are under contemplation, including the new scheme of railway line connecting Delhi with Sindh and running through the Bikaner and Jaisalmere States. At present there is practically no irrigation in the State, the crops depending wholly on the scanty rainfall; but the Sutlej Canal Project which is now under construction will irrigate annually 620,000 acres in the north and help to protect the State against the serious famines from which it has suffered in the past. Even larger expectations are held out from the Bhakra Dam Project from which it is hoped that the remaining level lands in the north of the State will be irrigated. A coal mine is worked at Palana, 14 miles south from the Capital.

Alwar State is a hilly tract of land in the East of Rajputana. Its Rulers belong to the Lalawat Naruka branch of Kshatrias, Solar Dynasty. This ruling family is descended from Raja Udai Karanji, who was the common ancestor of both Alwar and Jaipur. The State was founded by Pratab Singh, who before his death in 1791 had secured possession of large territories. His successor sent a force to cooperate with Lord Lake in the war of 1803 and an alliance was concluded with him in that year. Disputes about successions mark the history of the State during the earlier part of the nineteenth century. The present chief, H. H. Veerendra Shiromani Dev Col. Shri Sewai Maharaja Sir Jey Singhji Bahadur, G.C.I.E., K.C.S.I., who was born in 1882, succeeded his father in 1892 and was invested with powers in 1903. He carries on the administration with the assistance of five Ministers, Members of His Highness' Council and various heads of departments. The normal revenue and expenditure are about Rs. 55lakhs a year. The State besides maintaining other forces, maintains also the Imperial Service Troops which His Highness the late Maharaja was the first prince in Rajputana to offer (in 1888) in the defence of the Empire. Alwar stood first in recruiting in Rajputana at the time of the Great War and enjoys a salute of 17 guns. The capital is Alwar on the Rajputana-Malwa Railway, 98 miles west of Delhi.

RAJPUTANA.

Agent to Governor-General—The Hon. Mr. L. W. Reynolds C.S.I., C.I.E., M.C.

UDAIPUR.

Resident—Lieut. D. M. Field.

JAIPUR.

Resident—Lieut.-Col. C. H. Gabriel, C.V.O.

EASTERN RAJPUTANA STATES.

Political Agent—Lieut.-Col. H. R. N. Pritchard O.B.E.

WESTERN RAJPUTANA STATES.

Resident—Lt.-Col. C. H. Gabriel, C.V.O. (Offg).

HARAOTI AND TONK.

Political Agent—Lt.-Col. R. J. Macnabb.

SOUTHERN RAJPUTANA STATES.

Political Agent—Lt. D. M. Field.

CENTRAL INDIA AGENCY.

Central India Agency is the name given to the country occupied by the Indian States grouped together under the supervision of the Political Officer who is designated the Agent to the Governor-General in Central India with headquarters at Indore. As constituted in 1921—that is, after the separation of the Gwalior Residency—it is an irregularly formed tract lying in two sections, the Eastern comprising Bundelkhand and Baghelkhand Agencies between 22°-38′ and 26°-19′ North and 78°-10′ and 83°-0′ East and the Western consisting of the Bhopal and Southern States and Malwa Agencies between 21°-22′ and 24°-47′ North and 74°-0′ and 78°-50′ East. The British districts of Jhansi and Saugor and the Gwalior State divide the Agency into two sections. The total area covered is 51,531·3 square miles and the population (1921) amounts to 59,97,023. The great majority of the people are Hindus. There are 28 Salute States of which the following 10 have direct treaty engagements with the British Government:—Indore, Bhopal, Rewa, Orchha, Datia, Dhar, Dewas Senior Branch, Dewas Junior Branch, Samthar and Jaora. All of these are Hindu except Bhopal Jaora and Baoni which are Muhammedan. Besides these there are 56 Minor States and Guaranteed Estates. Excluding the Indore State and the Hirapur and Lalgarh Estates they are divided into following groups for administrative purposes:—Bhopal Agency, 8 States and Estates (principal State Bhopal); Baghelkhand Agency, 12 States and Estates (principal State Rewa); Bundelkhand Agency, 22 States and Estates (principal State Orchha); Southern States and Malwa Agency, 41 States and Estates (principal States Dhar, Dewas Senior Branch, Dewas Junior Branch, Jaora and Ratlam). The Agency may roughly be divided into two natural divisions, "Central India West comprising the former Plateau division with such hilly land as lies on this side and Central India East comprising the former low-lying area and

the Eastern hilly tracts." The hilly tracts lie along the ranges of the Vindhyas and Satpuras. They consist of forest areas and agriculture is little practised there, the inhabitants being mostly members of the wild tribes. The territories of the different States are much intermingled and their political relations with the Government of India and each other are very varied.

The following is the size, population and revenue of the ten treaty States mentioned above:—

Name.	Area in square miles.	Population.	Revenue
			Lakhs Rs.
Indore	9,519	11,51,598	124
Bhopal ..	6,902	6,92,448	62
Rewa	13,000	14,01,524	60
Orchha ..	2,079	2,84,948	10
Datia	911	1,48,659	19
Dhar	1,777	2,30,333	16
Dewas, Senior Branch ..	449	77,005	9
Dewas, Junior Branch ..	419	66,998	6
Samthar ..	180	33,216	3
Jaora	601	85,778	12

Gwalior.—The house of Scindia traces its descent to a family of which one branch held the hereditary post of patel in a village near Satara. The head of the family received a patent of rank from Aurangzebe. The founder of the Gwalior House was Ranoji Scindia who held a military rank under the Peshwa Baji Rao. In 1726 the Peshwa granted deeds to Puar, Holker and Scindia, empowering them to levy "Chauth" and "Sardesmukhi" and retain half the amount for payment to their troops. In 1736 Ranoji Scindia accompanied Baji Rao to Delhi where he and Mulhar Rao Holker distinguished themselves in military exploits. Ranoji fixed his headquarters at the ancient city of Ujjain, which for the time became the Capital of the Scindia dominions. During the time of Mahadji Scindia and Dowlat Rao Scindia Gwalior played an important part in shaping the history of India. Despite the partial reverse which Mahadji Scindia's troops suffered at the hands of the British in 1780, reverses which led to the treaty of Salbai (1782), Scindia's power remained unbroken. For the first time he was now recognized by the British as an independent sovereign and not as a vassal of the Peshwa

In 1790 his power was firmly established in Delhi. While he was indulging ambitious hopes he fell a prey to fever which ended his remarkable career on 12th February, 1794. Himself a military genius, Mahadji Scindia's armies reached the zenith of their glory under the disciplined training of the celebrated French adventurer—De Boigne. Mahadji was succeeded by his grandnephew Daulat Rao in whose service Perron, a Military Commander of great renown played a leading part. The strength of Scindia's Army was, however, considerably weakened by the reverses, sustained at Ahmednagar, Assaye, Asirgarh and Laswari. Daulat Rao Scindia died in 1827. Till his death he remained in undisputed possession of almost all the territory which belonged to him in 1805.

Daulat Rao was succeeded by Jankoji Rao who passed away in the prime of life. On his demise in 1843 intrigue and party spirit were rampant and the Army was in a state of mutiny with the result that it came into collision with the British forces at Maharajpore and Pannihar.

Jankoji Rao was succeeded by Jiaji Rao, whose adherence to the British cause during the dark days of Mutiny, when his own troops deserted him, was unshakable. In 1861 he was created a Knight Grand Commander of the Most Exalted Order of the Star of India and in 1877 was made a Councillor of the Empress. Subsequently he received other titles and entered into treaties of mutual exchange of territories with the British Government. He died on the 20th June 1886 and was succeeded by his son Lieutenant-General H. H. Maharaja Sir Madho Rao Scindia, Alijah Bahadur, G.C.V.O., G.C.S.I., G.B.E., A.D.C. to the King. He succeeded in 1886 and obtained powers in 1894. In 1901 he went to China during the war; he held the rank of honorary Lieutenant General of the British Army and the honorary degrees of LL.D., Cambridge, and D.C.L., Oxon. He was also a Donat of the Order of St. John of Jerusalem in England. He died in June 1925 and was succeeded by his son H. H. Jeewajirao Scindia in September 1925 during whose minority the administration of the State will be carried on by a Council of Regency.

The ruler of the State enjoys a salute of 21 guns. The State is in direct relations with the Government of India.

The northern part of the State is traversed by the G.I.P. Railway and two branches run from Bhopal to Ujjain and from Bina to Baran. The Gwalior Light Railway runs for 250 miles from Gwalior to Bhind, from Gwalior to Sheopur and from Gwalior to Shivpuri. The main industries are cotton ginning, which is done all over the State; fine muslins made at Chanderi, leather work, etc. The State maintains three regiments of Imperial Service Cavalry, two battalions of Imperial Service Infantry and a transport corps. Lashkar, the capital city, is two miles to the south of the ancient city and the fort of Gwalior. Annual income about 2 crores and expenditure about 175 lakhs.

Indore.—The founder of the House of the Holkar of Indore was Malhar Rao Holkar, born in 1693. His soldierly qualities brought him to the front under the Peshwa, who took him into his service and employed him for his conquests. When the Maratha power was weakened at the battle of Panipat in 1761, Malhar Rao had acquired territories stretching from the Deccan to the Ganges as a reward for his career as a Military Commander. He was succeeded by his grandson. On his death without issue his mother Ahilya Bai became the Ruler and her administration is still looked upon with admiration and reverence as that of a model ruler. She was succeeded by Tukoji Holkar who indeed had been associated with her to carry the Military administration and had in the course of it, distinguished himself in various battles. Tukoji was succeeded by Kashirao, who was supplanted by Jeswant Rao, his step brother, a person of remarkable daring and strategy as exhibited in a number of engagements in which he had taken part. The brilliant success he obtained at the battle of Poona

against the combined armies of Peshwa and Scindia made him a dictator of Poona for some time and he declared in consequence the independence of Holkar State. During 1804-5 he had a protracted war with the British, closed by a Treaty which recognised the independence of Holkar State with practically no diminution of its territories and rights. Jaswant Rao showed signs of insanity from 1808 onwards and succumbed to that malady in 1811, when he was succeeded by his minor son Malhar Rao II. During the Regency which followed, the power of the State was weakened by various causes, the most important of which was the refractory conduct of the Military Commanders. On the outbreak of the war between the English and the Peshwa in 1817, some of these commanders, with a part of the army, rebelled against the authority of the State and were disposed to befriend the Peshwa, while the Regent, mother and her Ministers were for friendship with the British. There was a battle between the British Army and this refractory portion of the Holkar Army which culminated in the latter's defeat. Holkar had to come to terms and to cede extensive territories and rights over the Rajput Princes to the British, but the internal sovereignty remained unaffected. The Treaty of 1818 which embodied these provisions still regulates the relations between the British Government and the State.

Malhar Rao was well served by his able Minister Tatya Jog. He died a premature death in 1833. Then followed the weak administration of Hari Rao and his son. In 1844 Tukoji Rao II ascended the throne; but as he was a minor, the administration was carried on by a Regency which was fortunate in having Sir Robert Hamilton, the Resident as its Adviser. The prosperity of the State revived a great deal during this administration and the progress was maintained after the Maharaja assumed powers in 1852. It was interrupted by the outbreak of Mutiny in 1857 in British India. This wave of disaffection did not leave some of the State troops untouched. The Maharaja with his adherents and the remaining troops remained however staunch to the British and gave every possible assistance to the British authorities at Indore, Mhow and other places, which was recognised by the British Government. The Maharaja died in 1886 after having effected various reforms in the administration and raised the position of the State to a high degree of prosperity and honour. He was succeeded by Shivaji Rao who reigned for 16 years and will be specially remembered for his beneficient measures in matters of education, sanitation, medical relief and abolition of transit duties. Tukoji Rao III, Ex-Maharaja, succeeded in 1903 while yet a minor. The Regency Adminstration continued till 1911 and it deserves credit for a number of reforms effected in all the branches of administration. The policy of the Regency was maintained by the Maharaja, and since his assumption of powers the State has advanced in education in general including female education, commerce and industrial developments, municipal franchise and other representative institutions. This prosperity is specially reflected in the Indore city, the population of which has risen by forty per cent. The city has a first grade college, 3 High Schools and 1 Sanskrit College, with a number of other Medical and educational institutions An Institute of Plant Industry for the improvement of cotton is located at Indore. It has also 9 Spinning and Weaving Mills.

During the War of 1914 the State placed all its resources at the disposal of the British Government. Its troops took part in the various theatres of war and the contribution of the State towards the War and Charitable Funds in money was 41 lakhs and its subscriptions to the War Loans amounted to Rs. 82 lakhs, while the contributions from the Indore people amounted to over one crore. This assistance received the recognition of the British Government. In the administration His Highness is assisted by his Prime Minister and a Council. The State Army consists of about over 3,200 officers and men. The State is traversed by the Holkar State Railway, the principal Station of which is Indore, R. M. Railway and B. B. & C. I. Railway and the U. B. Section of the G. I. P. Railway. Besides the trunk roads, there are 600 miles of roads constructed and maintained by the State. The reforms introduced were the establishment of State Savings Banks, Scheme of Life Insurance for State Officials, establishment of a Legislative Committee consisting of seven elected Members out of a total of nine Members, introduction of the Scheme of Compulsory Primary Education in the City of Indore, and measures for expansion of education in the mofussil.

His Highness Maharaja Tukoji Rao III abdicated in favour of his son. The present Maharaja Yeshwant Rao Holkar (a minor) was born on 6th September 1908. He received his education in England from 1920-23 and has again proceeded to Oxford for higher education. He married a daughter of the Junior Chief of Kagal (Kolhapur) in February 1924. The Maharaja being minor, the administration is conducted by the Cabinet and the Prime Minister in accordance with the existing rules and practice under the supervision of and with the advice of the Hon'ble the Agent to the Governor-General in Central India.

The chief imports are cloth, machinery, sugar, salt and kerosine oil. The total imports in 1927, amounted to Rs. 2,04,24,081.

The chief exports are cotton,cloth,tobacco and cereals. The total exports in 1927 amounted to Rs. 90,91,301; while the total production from Ginning Factories was valued at Rs. 2,45,37,949.

Cloth manufactured at the local mills is valued at nearly two crores and the local trade in wheat is estimated at one crore.

Cotton excise duty at 3½ per cent. *ad valorem* has been abolished from 1st May 1926 and an industrial tax is levied on the cotton mills from the same date at the rate of 1½ anna per rupee on all incomes upto Rs. 50,000, and 2½ annas per rupee on all incomes above Rs. 50,000.

The area of the State is 9,520 square miles with a revenue of about one crore and thirty eight lakhs.

Bhopal.—The principal Mussalman State in Central India ranks next in importance to Hyderabad among the Muhammadan States of India. The ruling family was founded by Dost Mohammed Khan, a Tirah Afghan. He was granted a *Sanad* of Bairasia and Nazirabad *Purganas* in recognition of his meritorious services to the Emperor of Delhi. With the

disintegration of the Mogul Empire Bhopal State developed into an independent State. In the early part of the 19th century, the Nawab successfully withstood the inroads of Scindia and Bhonsla and by the agreement of 1817 Bhopal undertook to assist the British with a contingent force and to co-operate against the Pindari bands.

The present ruler of the State, His Highness Sikander Saulat Nawab Iftikharul-Mulk, Mohammed Hamidullah Khan Bahadur, B.A., C.S.I., C.V.O., succeeded his mother, Her Highness Nawab Sultan Jahan Begum, on her abdication in May 1926. Having ably conducted the administration of the State for nearly ten years as Chief Secretary and afterwards as Member for Finance and Law and Justice Departments, His Highness is personally conversant with each and every detail of the administration.

The names of Members of His Highness' State Council are given below in order of precedence.

Ali Martabat, Sir Oswald Vivian Bosanquet, K.C.S.I., C.I.E., I.C.S., President of the State Council, and Member, Revenue Department.

Ali Martabat, Rai Bahadur Raja Oudh Narain Bisarya, B.A., Member for Finance. Law and Justice and Public Works Departments.

Ali Martabat Nasirul Mulk Moulvi Syed Leakat Ali, M.A., LL.B., Member, Robkari Khas.

Ali Martabat Dr. Sahebzada Saeeduzzafar Khan, M.B., Ch. B. (Edin.) D.T.M. (Liverpool), Member for Public Health and Education Department.

Ali Martabat Colone H. C. S. Ward, C.I.E., O.B.E., Member in charge of the Army Department.

Member, Political Department—Vacant.

For the present the Political Department is under His Highness' direct control.

The Secretary-in-charge of the Department is Ali-Qadar, Kazi Ali Haidar Abbasi.

Along with other troops, the State maintains one full strength Pioneer Battalion. The Capital, Bhopal City, situated on the Northern bank of an extensive lake, is the junction for the Bhopal-Ujjain Section of the Great Indian Peninsula Railway.

Rewa.—This state lies in the Baghelkhand Agency, and falls into two natural divisions separated by the scarp of the Kaimur range. The area is 13,000 sq. miles with a population of 14 lakhs. Its Chiefs are Baghel Rajputs descended from the Solanki clan which ruled over Gujarat from the tenth to the thirteenth century. In 1812, a body of Pindaries raided Mirzapur from Rewa territory and the Prince, who had previously rejected overtures for an alliance, was called upon to accede to a treaty acknowledging the protection of the British Government. During the Mutiny, Rewa offered troops to the British, and for his services then, various parganas, which had been seized by the Marathas, were restored to the Rewa Chief. The present chief is H. H. Bandhawesh Maharaja Sir Gulab Singhji Bahadur, K.C.S.I., who was born in 1903. He was married in 1919 to the sister of His Highness the Maharaja of Jodhpur. Upon the death of his father Col. H. H. Maharaja Sir Venkat Raman Singh Bahadur, on 30th October, 1918, H. H. Bandhawesh Maharaja Gulab Singh Bahadur succeeded to the gaddi on 31st October, as a minor. During the period of minority the State was administered by a Council of Regency with H. H. Maharaja Sir Sajjan Singh Bahadur Colonel, K.C.S.I., K.C.V.O., A.D.C., of Rutlam as Regent. H. H. Bandhawesh Maharaja Gulab Singh Bahadur attained majority in 1922 and was invested with full ruling power on 31st October 1922, by H. E. the Viceroy and the administration of the State is now carried on by him with the aid of four Commissioners. His Highness has got a son and heir named Maharaj Kumar Martand Singhji, born on 15th March 1923.

His Highness' second marriage with the daughter of H. H. Maharaja of Kishengarh was performed on the 18th February 1925.

Dhar.—This State, under the Agency for Southern States in Central India, takes its name from the old city of Dhar, long famous as the capital of the Paramara Rajputs, who ruled over Malwa from ninth to the thirteenth century and from whom the present chiefs of Dhar—Powar Marathas—claim descent. In the middle of the 18th century the Chief of Dhar, Anand Rao, was one of the leading chiefs of Central India, sharing with Holkar and Scindia the rule of Malwa. The State came into treaty relations with the British Government in virtue of the treaty of 1819. Lt.-Colonel H. H. the Maharaja Sir Udaji Rao Powar, Sahib Bahadur, K.C.S.I., K.C.V.O., K.B.E., died on 30th July 1926 and the government of the State is carried on by a Council with H. H. the Maharani Sahiba as President. There are 11 Feudatories and 9 Bhumias of whom 13 hold a guarantee from the British Government. The average expenditure is about 18 lakhs. Rao Bahadur K. Nadkar is Dewan of the State and Vice-President of the Council. The present Ruler His Highness Maharaja Anand Rao Puar Sahib Bahadur is a minor

Jaora State.—This State is in the Malwa Political Agency covering an area of about 601 square miles with a total population of 85,817, and has its headquarters at Jaora town. The Chiefs of Jaora claim descent from Abdul Majid Khan, an Afghan of the Tajik Khel, from Swat, who came to India to acquire wealth. The first Nawab was Ghafur Khan who obtained the State about the year 1808. The present chief is Lt.-Colonel H. H. Fakhrud-Daulah Nawab Sir Mohammad Iftikhar Ali Khan Saheb Bahadur Saulat-e-Jang, K.C.I.E., who was born in 1883 and is an Honorary Lt.-Colonel in the Indian Army.

In the administration of the State His Highness is assisted by a Council constituted as under :—*President* :—His Highness the Nawab Sahib, *Vice-President*:—Khan Bahadur Sahibzada Mohd. Serfraz Ali Khan, Chief Secretary; *Members*:—(1) Khan Bahadur Sahibzada Mohd. Sher Ali Khan, Military Secretary, (2) Sahibzada Mohd. Safdar Ali Khan, Private Secretary, (3) Munshi Ram Dayal, Financial Secretary, (4) Munshi Mohd. Mian Jan Khan, Senior Member, Revenue Board.

A Chief Court with a Chief Justice and two Puisne Judges and a Revenue Board with two members have also been established.

The soil of the State is among the richest in Malwa, being mainly of the best black variety bearing excellent crops of wheat, cotton and poppy. The average annual revenue is Rs. 11,67,000.

Rutlam—Is the premier Rajput State in the Malwa Agency. It covers an area of 871 square miles, including that of the Jagir of Khera in the Kushalgarh Chiefship, which pays an annual tribute to the Rutlam Darbar. The State was founded by Raja Ratansinghji, a great grandson of Raja Udai Singh of Jodhpur, in 1652. The Ruler of Rutlam is the religious head of the Rajputs of Malwa, and important caste questions are referred to him for decision. The State enjoys full and final civil and criminal powers. The present Ruler of Rutlam is Colonel His Highness Maharaja Sir Sajjan Singh, K.C.S.I., K.C.V.O. A.D.C., to H. R. H. the Prince of Wales, who was born in 1880, educated at Daly College, Indore, received military training in Imperial Cadet Corps and invested with full powers in 1898. His Highness served in the war in France and Egypt from 1915 to 1918, was mentioned in despatches and received the Criox d'Officiers de legion d'Honneur. Salute: 13 guns, local 15 guns.

Dewan—Rai Bahadur B. N. Zutshi, B.A., LL.B.

Datia State.—The rulers of this State, in the Bundelkhand Agency, are Bundela Rajputs of the Orchha house. The territory was granted by the chief of Orchha to his son Bhagwan Rao in 1626, this was extended by conquest and by grants from the Delhi emperors. The present Ruler Major His Highness Maharaja Lokendra Sir Govind Sinh Ju Deo Bahadur, K.C.S.I., 1918, who was born in 1886 and succeeded in 1907, married 1902, enjoys a salute of 15 guns. He placed all his resources and his personal services at the disposal of the Imperial Government during the Great War and established a War Hospital at Datia. He is a progressive Ruler and has created a Legislative Council and introduced many useful and important reforms in his State. He is a Vice-President of St. John Ambulance Association, a patron of Red Cross Society and has recently offered to the Imperial City of Delhi the life size marble statue of Lord Reading, the late Viceroy. His Highness is a famous big game shot and has shot more than 108 tigers. The Heir Apparent Raja Bahadur Balbhadra Singh, born 1907, has married a daughter of the Maharaja Bahadur of Balrampur and is a very promising prince.

Orchha State.—The rulers of this State are Bundela Rajputs claiming to be descendants of the Gaharwars of Benares. It was founded as an independent State in 1048 A.D. It entered into relations with the British by the treaty made in 1812. The present ruler is His Highness Sir Pratap Singh, G.C.S.I., G.C.I.E., who was born in 1854. He has the hereditary titles of His Highness Saramad-i-rajhai-Bundelkhand Maharaja Mahendra Sawai Bahadur. The present chief enjoys a salute of 17 guns. The State has a population of about 330,032 and an area of 2,080 square miles. The capital is Tikamgarh, 36 miles from Lalitpur Station, on the G.I.P. Railway. Orchha, the old capital, has fallen into decay but is a place of interest on account of its magnificent buildings of which the finest were erected by Maharaj Bir Singh Deo, the most famous ruler of the State (1605-1627).

GWALIOR.

Resident—Lt.-Col. R. J. W. Heale, O.B.E.

BHOPAL.

Political Agent—Lt.-Col. D. G. Wilson.

BUNDELKHAND.

Political Agent— K. S. Fitze (Offg).

BAGHELKHAND.

Political Agent—K. S. Fitze.

Sikkim.

Sikkim is bounded on the north and north-east by Tibet, on the south-east by Bhutan, on the south by the British district of Darjeeling, and on the west by Nepal. The population consists of Bhutias, Lepchas, and Nepalese. It forms the direct route to the Chumbi Valley in Tibet. The main axis of the Himalayas, which runs east and west, forms the boundary between Sikkim and Tibet. The Singalila and Chola ranges, which run southwards from the main chain, separate Sikkim from Nepal on the west, and from Tibet and Bhutan on the east. On the Singalila range rise the great snow peaks of Kinchinjunga (28,146 feet), one of the highest mountains in the world. The Chola range which is much loftier than that of Singalila, leaves the main chain at the Dongkya La.

Tradition says that the ancestors of the Rajas of Sikkim originally came from eastern Tibet. The State was twice invaded by the Gurkhas at the end of the eighteenth century. On the outbreak of the Nepal War in 1814, the British formed an alliance with the Raja of Sikkim and at the close of the war the Raja was rewarded by a considerable cession of territory. In 1835 the Raja granted the site of Darjeeling to the British and received Rs. 12,000 annually in lieu of it. The State was previously under the Government of Bengal, but was brought under the direct supervision of the Government of India in 1906. The State is thinly populated, the area being 2,818 square miles, and the population 81,721, chiefly Buddhists and Hindus. The most important crops are maize and rice. There are several trade routes through Sikkim from Darjeeling District into Tibet. In the convention of 1890 provision was made for the opening of a trade mart but the results were disappointing, and the failure of the Tibetans to fulfil their obligations resulted in 1904 in the despatch of a mission to Lhasa, where a new convention was signed. Trade with the British has increased in recent years, and is now between 40 and 50 lakhs yearly. A number of good roads have been constructed in recent years. The present ruler, His Highness Maharajah Sir Tashi Namgyal, K.C.I.E., was born in 1893 and succeeded in 1914. His Highness was invested with full ruling powers on the 5th April 1918. The title of a C.I.E. was conferred upon the Maharaja on the 1st January 1918 and K.C.I.E. on 1st January 1923. The average revenue is Rs. 6,73,976

Political Officer in Sikkim:—Lt.-Col. F. M. Bailey, C.I.E.

Bhutan.

Bhutan extends for a distance of approximately 190 miles east and west along the southern slopes of the central axis of the Himalayas, adjacent to the northern border of Eastern Bengal and Assam. Its area is 18,000 square miles and its population, consisting of Buddhists and Hindus, has been estimated at 300,000. The country formerly belonged to a tribe called Tek-pa, but was wrested from them by some Tibetan soldiers about the middle of the seventeenth century. British relations with Bhutan commenced in 1772 when the Bhotias invaded the principality of Cooch Behar and British aid was invoked by that State. After a number of raids by the Bhutanese into Assam, an envoy (the Hon. A. Eden) was sent to Bhutan, who was grossly insulted and compelled to sign a treaty surrendering the Duars to Bhutan. On his return the treaty was disallowed and the Duars annexed. This was followed by the treaty of 1865, by which the State's relations with the Government of India were satisfactorily regulated. The State formerly received an allowance of half a lakh a year from the British Government in consideration of the cession in 1865 of some areas on the southern borders. This allowance was doubled by a new treaty concluded in January 1910, by which the Bhutanese Government bound itself to be guided by the advice of the British Government in regard to its external relations, while the British Government undertook to exercise no interference in the internal administration of Bhutan. On the occasion of the Tibet Mission of 1904, the Bhotias gave strong proof of their friendly attitude. Not only did they consent to the survey of a road through their country to Chumbi, but their ruler, the Tongsa Penlop, accompanied the British troops to Lhasa, and assisted in the negotiations with the Tibetan authorities. For these services he was made a K.C.I.E., and he has since entertained the British Agent hospitably at his capital. The ruler is now known as H.H. the Maharaja of Bhutan, Sir Uggen Wangchuk, K.C.S.I., K.C.I.E. At the head of the Bhutan Government, there are nominally two supreme authorities; the Dharma Raja, known as Shapting Renipoche, the spiritual head; and the Deb or Depa Raja, the temporal ruler. The Dharma Raja is regarded as a very high incarnation of Buddha, far higher than the ordinary incarnations in Tibet, of which there are several hundreds. On the death of a Dharma Raja a year or two is allowed to elapse, and his reincarnation then takes place, always in the Choje, or royal family of Bhutan.

Cultivation is backward and the chief crop is maize. The military force consists of local levies under the control of the different chiefs. They are of no military value.

Nepal.

The kingdom of Nepal is a narrow tract of country extending for about 520 miles along the southern slope of the central axis of the Himalayas. It has an area of about 56,000 square miles, with a population of about 5,580,000, chiefly Hindus. The greater part of the country is mountainous, the lower slopes being cultivated. Above these is a rugged broken wall of rock leading up to the chain of snow-clad peaks which culminate in Mount Everest (29,002 feet) and others of slightly less altitude. The country before the Gurkha occupation was split up into several small kingdoms under Newar kings. The Gurkhas under Prithvi Narayan Shah overran and conquered the different kingdoms of Patan, Kathmandu, and Bhatgaon, and other places during the latter half of the 18th century and since then have been rulers of the whole of Nepal. In 1846 the head of the Rana family Maharaja Jung Bahadur Rana, obtained from the sovereign the perpetual right to the office of Prime Minister of Nepal, and the right is still enjoyed by the descendants of the Rana family. In 1850 Jung Bahadur paid a visit to England and was thus the first Hindu Chief to leave India and to become acquainted with the power and resources of the British nation. The relations of Nepal with the Government of India are regulated by the treaty of 1816 and subsequent agreements by which a representative of the British Government is received at Kathmandu. By virtue of the same treaty Nepal maintains a Representative at Delhi and her treaty relations with Tibet allow her to keep a Resident at Lhasa of her own. Her relation with China is of a friendly nature. Ever since the conclusion of the treaty of 1816 the friendly relations with the British Government have steadily been maintained and during the rule of the present Prime Minister it has been at its height as is evidenced by the valuable friendly help in men and money which has been given and which was appreciatively mentioned in both the Houses of Parliament and by Mr. Asquith in his Guildhall speech in 1915. The message from His Majesty the King Emperor to the Nepalese Prime Minister sent on the termination of hostilities and published at the time as also the Viceroy's valedictory address to the Nepalese contingent on the eve of their return home after having laudably fulfilled their mission in India eloquently and gratefully acknowledged the valuable help rendered by Nepal during the four and a half years of war. To further strengthen and cement the bonds of friendship that have subsisted so long between the two countries, the present Prime Minister, Marshal and Supreme Commander-in-Chief, signed a new Treaty of friendship concluded between the Governments of Nepal and Great Britain on the 21st December 1923.

From the foregoing account of the history of Nepal it will be seen that the Government of the country has generally been in the hands of the Minister of the day. Since the time of Jung Bahadur this system of government has been clearly laid down and defined. The sovereign or Maharajadhiraja, as he is called, is but a dignified figure-head, whose position can best be likened to that of the Emperor of Japan during the Shogunate. The present King, His Majesty Maharajadhiraja Tribhubana Bir Bikram Jung Bahadur Shah Bahadur Shum Shere Jung Deva, ascended the throne on the death of his father in 1911. The real ruler of the country is the Minister who, while enjoying complete monopoly of power, couples with his official rank the exalted title of Maharaja. Next to him comes the Commander-in-Chief, who ordinarily succeeds to the office of Minister.

The present Minister at the head of affairs of Nepal is Maharaja Chandra Shum Shere Jung

Bahadur Rana, G.C.B., G.C.S.I., G.C.M.G., G.C.V.O., D.C.L., Hon. Genl., British Army; Hon. Col., Fourth Gurkhas; Thong-Lin-Pimma-Kokang-Wang-Syan; (Highest rank in the Chinese organisation); Grand Officier de la Legion d'Honneur, Prime Minister, Marshal and the Supreme Commander-in-Chief, Nepal, June 1901.

Rice, wheat and maize form the chief crops in the low lands. Mineral wealth is supposed to be great, but, like other sources of revenue, has not been developed. Communications in the State are primitive, but since 1920 the Government has already undertaken the construction of a good and permanent road for vehicular traffic from Raxaul to Bhimphedi—the base of a steep ridge in the main route to the capital of the country from British India—and also has installed a ropeway to connect this base with the capital proper covering a distance of 14 miles. A light railway from Amlekhgung covering a distance of 25 miles in the route and connecting with the B. & N. W. Ry. at Raxaul also has been constructed and opened for traffic since March 1927. It has also put up a telephone over this route connecting the capital with the frontier township of Birgunge near Raxaul. The revenue is about two crores of rupees per annum. The standing army is estimated at 45,000 the highest posts in it being filled by relations of the minister. The State is of considerable archæological interest and many of the sites connected with scenes of Buddha's life have been identified in it by the remains of inscribed pillars.

British Envoy—W. H. J. Wilkinson, C.I.E. C.V.O.

NORTH-WEST FRONTIER STATES.

The Indian States of the North-West Frontier Provinces are Amb, Chitral, Dir and Phulera. The total area is about 7,704 square miles and the population, mainly Mahomedan, is 1,622,094. The average annual revenue of the first three is about Rs. 4,65,000, that of Phulera is unknown.

Amb.—Is only a village on the western bank of the Indus in Independent Tanawala.

Chitral.—Runs from Dir to the south of the Hindu-Kush range in the north, and has an area of about 4,500 square miles. The ruling dynasty has maintained itself for more than three hundred years, during the greater part of which the State has constantly been at war with its neighbours. It was visited in 1885 by the Lockhart Mission, and in 1889, on the establishment of a political agency in Gilgit, the ruler of Chitral received an annual subsidy from the British Government. That subsidy was increased two years later on condition that the ruler, Amam-ul-Mulk, accepted the advice of the British Government in all matters connected with foreign policy and frontier defence. His sudden death in 1892 was followed by a dispute as to the succession. The eldest son Nizam-ul-Mulk was recognised by Government, but he was murdered in 1895. A war was declared by Umrakhan of Jandul and Dir against the infidels and the Agent at Gilgit, who had been sent to Chitral to report on the situation, was besieged with his escort and a force had to be despatched (April 1895) to their relief.

The three valleys of which the State consists are extremely fertile and continuously cultivated. The internal administration of the country is conducted by His Highness Sir Shujaul-mulk, K.C.I.E., the Mehtar of Chitral, and the foreign policy is regulated by the Political Agent at Malakand.

Dir.—The territories of this State, about 5,000 square miles in area, include the country drained by the Panjkora and its affluents down to the junction of the former river with the Bajaur Rud. The Nawab of Dir is the overlord of the country, exacting allegiance from the petty chiefs of the clans. Dir is mainly held by Yusufzai Pathans, the old non-Pathan inhabitants being now confined to the upper portion of the Panjkora Valley known as the Bashkar.

Political Agent for Dir, Swat and Chitral C. Latimer, C.I.E., I.C.S.

STATES IN THE MADRAS PRESIDENCY.

The Madras Presidency includes 5 Indian States covering an area of 10,643 square miles. Of these, the States of Travancore and Cochin represent ancient Hindu dynasties. Pudukottai is the inheritance of the chieftain called the Tondiman. Banganapalle and Sandur two petty States, of which the first is ruled by a Nawab, lie in the centre of two British districts.

Name.	Area sq. miles.	Population.	Estimated Gross Revenue in lakhs of rupees
Travancore ..	7,625	4,006,062	238·54
Cochin ..	1,417¾	979,019	76·59
Pudukottai ..	1,179	426,813	22·61
Banganapalle .	255	36,692	3·58
Sandur ..	167	11,684	1·42

These States were brought into direct relation with the Government of India on October 1st, 1923.

Travancore.—This State, which has an area of 7,624·84 square miles and a population of 4,006,062 with a revenue of Rs. 238·54 lakhs occupies the south-west portion of the Indian Peninsula, forming an irregular triangle with its apex at Cape Comorin. The early history of Travancore is in great part traditional; but there is little doubt that H. H. the Maharaja is the representative of the Chera dynasty, one of the three great Hindu dynasties which exercised sovereignty at one time in Southern India. The petty chiefs, who had subsequently set up as independent rulers within the State, were all subdued, and the whole country, included within its present boundaries, was consolidated and brought under one rule, by the Maharaja Marthanda Varma (1729-58). The English first settled at Anjengo, a few miles to the north

of Trivandrum, and built a factory there in 1684. In the wars in which the East India Company were engaged in Madura and Tinnevelly, in the middle of the 18th century, the Travancore State gave assistance to the British authorities. Travancore was reckoned as one of the staunchest allies of the British Power and was accordingly included in the Treaty made in 1784 between the East India Company and the Sultan of Mysore. To protect the State from possible inroads by Tippu, an arrangement was come to in 1788 with the East India Company, and in 1795 a formal treaty was concluded, by which the Company agreed to protect Travancore from all foreign enemies. In 1805 the annual subsidy to be paid by Travancore was fixed at 8 lakhs of rupees.

H. H. the Maharaja (*b.* November 1912) ascended the masnad in September 1924. During the minority the State is ruled by Her Highness Maharani Setu Lakshmi Bai, aunt of the Maharaja, as Regent on his behalf. The work of legislation is entrusted to a Council brought into existence in 1888 and as last reconstituted in 1921, has a majority of non-official elected members. The Council is invested with the powers of voting on the budget, moving resolutions and asking questions including supplementary questions. Women are placed on a footing of complete equality with men in the matter of both franchise and membership. This is the largest measure of constitutional reform introduced in any Indian State. A representative assembly known as the Sri Mulam Popular Assembly meets once a year. Its members who are the elected representatives of the people are given an opportunity to express direct to the Dewan their wants and wishes and their views regarding the administrative measures adopted from time to time. Local Self-Government on a small scale exists in the more important towns. The State supports a military force of 1,473 men. Education has advanced considerably in recent years and the State takes a leading place in that respect. In the matter of female Education the State has a leading place among Indian States and the British Indian Provinces. The principal food-grain grown is rice, but the main source of agricultural wealth is the cocoanut. Other crops are pepper, areca-nut, jack-fruit, sugar-cane and tapioca. Rubber and tea are among other important products. Cotton weaving and the making of matting from the coir are among the chief industries. The State is well provided with roads, and with a natural system of back-waters, besides canals and rivers navigable for country crafts. One line of railway about one hundred miles in length cuts across the State from east to west and then runs along the Coast to the Capital. More railway lines are in contemplation. The capital is Trivandrum.

Agent to the Governor-General—Lt.-Col. C. G. Crosthwaite, C.B.E.

Dewan—Maurice E. Watts, B.A., Bar-at-Law.

Cochin.—This State on the south-west coast of India is bounded by the Malabar District of the Madras Presidency and the State of Travancore. Very little is known of its early history. According to tradition, the Rajas of Cochin hold the territory in right of descent from Cheraman Perumal, who governed the whole country of Kerala, including Travancore and Malabar, as Viceroy of the Chola Kings about the beginning of the ninth century, and afterwards established himself as an independent Ruler. In 1502, the Portuguese were allowed to settle in what is now British Cochin and in the following year they built a fort and established commercial relations in the State. In the earlier wars with the Zamorin of Calicut, they assisted the Rajas of Cochin. The influence of the Portuguese on the west coast began to decline about the latter part of the seventeenth century, and in 1663 they were ousted from the town of Cochin by the Dutch with whom the Raja entered into friendly relations. About a century later, in 1759, when the Dutch power began to decline, the Raja was attacked by the Zamorin of Calicut, who was expelled with the assistance of the Raja of Travancore. In 1776, the State was conquered by Hyder Ali, to whom it remained tributary and subordinate, and subsequently to his son, Tippu Sultan. A treaty was concluded in 1791 between the Raja and the East India Company, by which His Highness agreed to become tributary to the British Government for his territories which were then in the possession of Tippu, and to pay a subsidy.

His Highness Raja Sri Sir Rama Varmah, G.C.S.I., G.C.I.E., who was born in 1852, and who ascended the Masnad in 1895, having abdicated in December, 1914. His Highness Sri Sir Rama Varmah, G.C.I.E., who was born on 6th October, 1858, succeeded to the throne and was duly installed as Raja on the 21st January 1915. The administration is conducted under the control of the Maharaja whose chief Minister and Executive Officer is the Dewan, Rao Bahadur T. S. Narayana Iyer, M.A., B.L. The forests of Cochin form one of its most valuable assets. They abound in teak, ebony, blackwood, and other valuable trees. Rice forms the staple of cultivation. Cocoanuts are largely raised in the sandy tracts, and their products form the chief exports of the State. Communications by road and back-waters are good, and the State owns a line of railway from Shoranore to Ernakulam, the capital of the State, and a Forest Steam Tramway used in developing the forests. The State supports a force of 32 officers and 330 men.

Agent to the Governor-General—Lt.-Col. C. G. Crosthwaite, C.B.E.

Pudukkottai.—This State is bounded on the north and west by Trichinopoly, on the south by Ramnad and on the east by Tanjore. In early times a part of the State belonged to the Chola Kings and the southern part to the Pandya Kings of Madura. Relations with the English began during the Carnatic wars. During the siege of Trichinopoly by the French in 1752, the Tondiman of the time did good service to the Company's cause by sending them provisions, although his own country was on at least one occasion ravaged as a consequence of his fidelity to the English. In 1756 he sent some of his troops to assist Muhammad Yusuf, the Company's sepoy commandant, in settling the Madura and Tinnevelly countries. Subsequently he was of much service in the wars with Haidar Ali. His services were

rewarded by a grant of territory subject to the conditions that the district should not be alienated (1806). Apart from that there is no treaty or arrangement with the Raja. His Highness Sri Brihadamba Das Sir Marthanda Bhairava Tondiman Bahadur, G.C.I.E., the Raja, died in Paris on 28th May 1928 and the *Gadi* is vacant at present. The various departments are constituted on the British India model. The principal food crop is rice. The forests, which cover about one-seventh of the State, contain only small timber. There are no large industries. The State is well provided with roads, but Pudukkottai is the only municipal town in the State.

Agent to the Governor-General—Lt.-Col. C. G. Crosthwaite, C.B.E.

Assistant Agent to the Governor-General—Rao Sahib E. K. Govindan.

Banganapalle.—This is a small State in two detached portions which in the eighteenth century passed from Hyderabad to Mysore and back again to Hyderabad. The control over it was ceded to the Madras Government by the Nizam in 1800. The present ruler is Nawab Meer Fazle Ali Khan Bahadur. The chief food-grain is cholam. The Nawab pays no tribute and maintains no military force. The revenue of the State is over 3 lakhs. The Nawab enjoys a salute of 9 guns.

Agent to the Governor-General :—Lieut.-Col. C. G. Crosthwaite, C.B.E.,

Assistant Agent to the Governor-General :—Rao Sahib E. K. Govindan.

Sandur.—The State is almost surrounded by the District of Bellary, the Collector of which is the Assistant to the Governor-General's Agent. After the destruction of the Empire of Vijayanagar in 1565 the State came to be held by semi-independent chiefs under the nominal sovereignty of the Sultan of Bijapur and in 1728 one of these chiefs, a Poligar of Bedar tribe, was turned out by an ancestor of the present Raja named Siddoji Rao of the Bhosle family of the famous Maharatta Chief Sivaji; they were Senapathies of Sivaji. In Siva Rao's time the State came under the Madras Government and his heirs in perpetuity with full powers, Civil and Criminal. In 1876 the title of Raja was conferred on the Chief as a hereditary distinction. The present ruler is Raja Shrimant Yeshwant Rao Anna Saheb Ghorpade who is a minor,

Assistant Agent to the Governor-General :—Rao Sahib E. K. F Govindan.

The Raja pays no tribute and maintains no military force. The most important staple crop is cholam. Teak and sandalwood are found in small quantities in the forests.

The minerals of the State possess unusual interest. The hematites found in it are probably the richest ore in India. An outcrop near the southern boundary forms the crest of a ridge 150 feet in height, which apparently consists entirely of pure steel grey crystalline hematite (specular iron) of intense hardness. Some of the softer ores used to be smelted, but the industry has been killed by the cheaper English iron. Manganese deposits have also been found in three places, and during 1911 to 1914 over 223,000 tons of manganese ore were transported by one company.

Agent to the Governor-General :—Lieut.-Col. C. G Crosthwaite, C.B.E.

STATES OF WESTERN INDIA.

Owing to the large number of States concerned and the interlacing of their territories with neighbouring British districts, the transfer of States under the Bombay Government to direct political relations with the Government of India (which was advocated in the Montagu-Chelmsford Report on the Constitutional Reforms) had been delayed. The first stage of that process, however, was carried out in October, 1924, when a new Residency was created in direct relation with the Government of India comprising the whole of the compact area making up the Kathiawar, Cutch and Palanpur Agencies under the Government of Bombay.

Resident of the First Class and Agent to the Governor-General in the States of Western India :—The Hon'ble Lt.-Col. H. S. Strong.

Judicial Commissioner in the States of Western India :—R. S. Broomfield, I.C.S.

Kathiawar.—Kathiawar is the peninsula lying immediately to the North of Gujarat in the Bombay Presidency. Its extreme length is about 220 miles and its greatest breadth about 165 miles, the area being 23,445 square miles. There are nearly 200 separate States in Kathiawar, which for purposes of administrative convenience is sub-divided into subordinate Agencies known as the Western and Eastern Kathiawar Agencies. The Western Kathiawar Agency comprises the Halar and Sovath Prants, while the Eastern Kathiawar Agency Comprises the Prants of Jhalawad and Gohelwad but in which ever of these two Agencies States with Salutes of guns are situated, they are in direct political relations with the Hon'ble the Agent to the Governor-General. The history of the British connection with Kathiawar commences from Colonel Walker's settlement of 1807. In 1863, the States in Kathiawar were classified into 7 classes, and although classes have since been abolished, the various jurisdictions still remained graded, as fixed in 1863.

Cutch.—Before the creation in October 1924, of the Western India States Agency, the relations of the Cutch Durbar with the Bombay Government were conducted through a Political Agent in charge of the Cutch Agency, with Headquarters at Bhuj. The Cutch Agency and the appointment of the Political Agent have since been abolished and the State of Cutch is in direct relations with the Hon'ble the Agent to the Governor-General in the States of Western India.

Banas Kantha Agency.—TheBanas Kantha Agency is the name given to the area formerly known as the Palanpur Agency, in which were situated the two important States of Palanpur and Radhanpur, and a number of smaller States

and Agency Thanas. The States of Palanpur and Radhanpur are now in direct political relations with the Hon'ble the Agent to the Governor-General in the States of Western India while the Political Agent, Banas Kantha Agency, with Head-quarters at Palanpur, is responsible for the remainder of the late Palanpur Agency.

Bhavnagar.—This State lies at the head and west side of the Gulf of Cambay. The Gohel Rajputs, to which tribe the Ruler of Bhavnagar belongs, are said to have settled in the country about the year 1260, under Sajakji from whose three sons—Ranoji, Saranji and Shahji—are descended respectively the chiefs of Bhavnagar Lathi and Palitana. An intimate connexion was formed between the Bombay Government and Bhavnagar in the eighteenth century when the chief of that State took pains to destroy the pirates which infested the neighbouring seas. The State was split up when Gujarat and Kathiawar were divided between the Peshwa and the Gaekwar; but the various claims over Bhavnagar were consolidated in the hands of the British Government in 1807. The State pays an annual tribute of Rs. 1,28,060 to the British Government, Rs. 3,581-8-0 as Peshkashi to Baroda, and Rs. 22,858 as Zortalbi to Junagadh. During the minority of His Highness the Minor Maharaja Krishna Kumarsinhji who succeeded to the *gadi* on the death of his father, Maharaja Sir Bhavsinhji, K.C.S.I., on 17th July 1919, the administration of the State has been entrusted to a Council of Administration. The Council consists of Sir Prabhashankar D. Pattani, K.C.I.E., as President, and Lieut.-Colonel A. H. E. Mosse as Vice-President. The other members of the Council are Dewan Bahadur T. K. Trivedi and Mr. S. A. Goghawala, M.A., LL.B., Bar-at-law. One noteworthy feature in the administration is the complete separation of judicial from executive functions and the decentralisation of authority is another. The authority and powers of all the Heads of Departments have been clearly defined, and each within his own sphere is independent of the others, being directly responsible to the Council.

The chief products of the State are grain, cotton, sugar-cane and salt. The chief manufactures are oil, copper and brass vessels and cloth. The Bhavnagar State Railway is 288 miles in length. The capital of the State is the town and port of Bhavnagar, which has a good and safe harbour for shipping and carried on an extensive trade as one of the principal markets and harbours of export for cotton in Kathiawar. Bhavnagar supports 264 State Lancers and 250 State Infantry.

Population (in 1921) was 426,404 of whom 86 per cent. were Hindus and 8 per cent. Mahomedans. The average income for the last five years was Rs. 91,24,677 and the average expenditure Rs. 83,11,480.

Dhrangadhra State is a State of the First Class in Kathiawar with a population of nearly one lakh and an area of 1,167 square miles exclusive of the Dhrangadhra portion of the Rann of Kutch. The ruler of Dhrangadhra is the head of the Jhala family of Rajputs, originally called the Makvanas. This Rajput clan is of great antiquity having migrated to Kathiawar from the North, establishing itself first at Patri in the Ahmedabad District, thence moving to Halvad and finally settling in its present seat. Being the guardians of the North-Eastern marches of Kathiawar they had to suffer repeatedly from the successive inroads of the Mahomedans into that Peninsula, but after suffering the various vicissitudes of war they were confirmed in their possession of Halvad, its surrounding territories and the salt-pans attached thereto by an Imperial Firman issued by Emperor Aurangzeb. The States of Vankaner, Limbdi, Wadhwan, Chuda, Sayla and Than-Lakhtar are offshoots from Dhrangadhra. His Highness Maharana Shri Sir Ghanshyamsinhji, G.C.I.E., K.C.S.I., Maharaja Raj Saheb, is the ruler of the State and the titular head of all the Jhalas. The administration is conducted under the Maharaja's directions by the Dewan Rana Shri Mansinhji S. Jhala, C.I.E. The soil being eminently fit for cotton cultivation, the principal crops are long stapled cotton and cereals of various kinds. Excellent building and ornamental stone is quarried from the hills situated within the State. Wadagra salt of an excellent quality with Magnesium chloride and other bye-products of salt are also manufactured at the State Salt works at Kuda which offer practically inexhaustible supplies for their manufacture. The capital town is Dhrangadhra, a fortified town, 75 miles west of Ahmedabad.

Dhrangadhra State owns the Railway from Wadhwan Junction to Halvad, a distance of 40 miles, which is worked by the B. B. &. C. I. Railway. An extension of this line to Maliya is under contemplation. A railway siding has been laid from Dhrangadhra to Kuda—a distance of 11 miles—to facilitate the salt traffic.

Gondal State.—The Ruling Prince of Gondal is a Rajput of the Jadeja stock with the title of H. H. Maharaja Thakore Saheb the present Ruler being H. H. Shri Bhagwat Sinhji, G.C.I.E., The early founder of the State Kumbhoji I., had a modest estate of 20 villages. Kumbhoji II., the most powerful Chief of the House, widened the territories to almost their present limits by conquest; but it was left to the present ruler to develop its resources to the utmost, and in the words of Lord Reay, Governor of Bombay, by its "importance and advanced administration" to get it recognised as a First Class State. The State pays a tribute of Rs. 1,10,721. The chief products are cotton and grain and the chief manufactures are cotton and woollen fabrics and gold embroidery. Gondal has always been pre-eminent amongst the States of its class for the vigour with which public works have been prosecuted, and was one of the earliest pioneers of railway enterprise in Kathiawar, having initiated the Dhasa-Dhoraji line, it owns the Dhasa-Jam Jodhpur section called the Gondal Railway and manages it along with the Jetalsar-Rajkot Railway and H. H. Gaekwad's Khijadiya-Dhari line; it subsequently built the Jetalsar-Rajkot Railway in partnership with other Native States in Kathiawar. There are no export and import dues, the people being free from taxes and dues. Comparatively speaking Gondal stands first in Kathiawar in respect

of the spread of education. Compulsory female education in the State has been recently ordered by His Highness. Rs. 25 lakhs have been spent on irrigation tanks and canals, water supply and electricity to the town of Gondal. The Capital is Gondal, a fortified town on the line between Rajkot and Jetalsar.

Junagadh State.—A first class State under the Western India States Agency and lies in the South-Western portion of the Kathiawar Peninsula between 24°-44′ and 21°-53′ North latitude; 80° and 72 East longitude with the Halar division of the province as its northern boundary and Gohilwad Prant to its east. It is bounded on the south and west by the Arabian sea. The State is divided into 13 Mahals. It has 16 ports of which the principal are Veraval and Mangrol. The principal rivers in the State are the Bhadar, Uben, Ozat, Hiran, Saraswati, Machhundri, Singaoda, Meghal, Vrajmi, Rival and Sabli. The principal town of Junagadh, which is one of the most picturesque towns in India, is situated on the slope of the Girnar and the Datar Hills, while in antiquity and historical interest it yields to none. The Upperkote or old citadel contains interesting Buddhist caves and the whole of the ditch and neighbourhood is honeycombed with caves of their remains. There are a number of fine modern buildings in the town. The famous Ashoka inscription of the Buddhist time carved out on a big bolster of black granite stone is housed at the foot of the Girnar Hill, which is sacred to the Jains, the Shivaites, the Vaishnavites and other Hindus. To the south-east of the Girnar Hill lies the extensive forest of the Gir comprising 494 square miles, 823 acres and 10 gunthas. It supplies timber and other natural products to the residents of the State and the neighbouring districts and is unique as the sole stronghold of the Indian lion. The area of the State is 3,336.9 square miles and the average revenue amounts to about Rs. 73,00,000. The total population according to the census of 1921 was 4,65,493 of which 3,68,003 were Hindus 90,091 Mahomedans 7,216 Jains, 90 Christians, 53 Parsis while 40 were of other castes. Until 1472 when it was conquered by Sultan Mahomed Begra of Ahmedabad Junagadh was a Rajput State ruled by Chiefs of the Chuda Sama tribe. During the reign of theEmperor Akbar it became a dependency of Delhi under the immediate authority of Moghal Viceroy of Gujarat. About 1735 when the representatives of the Moghals had lost his authority in Gujarat, Sherkhant Babi, the ancestor of the present Babi Ruler, expelled the Moghal Governor, and established his own rule. The ruler of Junagadh first entered into engagements with the British Government in 1807. The principal articles of production in the State are cotton. bajri, juwar, sesamum, wheat, rice, sugarcane, cereals, grass, timber, stone, castor-seed, fish, country tobacco, groundnuts, cocoanuts, bamboos, etc., while those of manufacture are ghee, molasses, sugar candy, copper, and brassware, dyed cloth, gold and silver embroidery, pottery, hardware leather, bamboo furniture, etc. The State pays a tribute of Rs. 28,394 annually to the Paramount Power and Peshkashi of Rs. 38,210 to His Highness the Gaekwar on the other hand, the State of Junagadh receives atribute styed Zortalbi amounting to Rs. 92,421 from not less than 134 States and Talukas, a relic of the day of Mahomedan supremacy. The State maintains Junagadh State Forces and the Mahabat Khanji Infantry, the sanctioned strength of the former being 173 and of the latter 220 inclusive of Bag-pipe Band.

The Chief bears the title of Nawab. The present Nawab is His Highness Sir Mahabat Khan III, K.C.S.I., and is the ninth in succession and seventh in descent from His Highness Nahadurkhanji I, the founder of the Babi Family of Junagadh in 1735 A. D. His Highness the Nawab Saheb was born on 2nd August 1900 and succeeded to the *gadi* in 1911, visited England in 1913-14, received his education at the Mayo College, Ajmer, and has been invested with full powers since March 1920. His Highness the Nawab Saheb is the Ruler of the Premier State in Kathiawar, ranks first amongst the Chiefs of Kathiawar, exercising plenary powers and enjoys a salute of 15 guns personal, 13 permanent and 15 local within the territorial limits of the Junagadh State. Languages Spoken:—Gujarati and Urdu.

Capital:—Junagadh.
Ruler:—His Highness Sir Mahabat Khanji Rasulkhanji, K.C.S.I.,

Heir-Apparent-Mahomed Dilawarkhanji, Prince Mahomed Himatkhanji.

Navanagar State, on the southern shore of the Gulf of Cutch, has an area of 3,791 square miles. The Maharaja of Navanagar is a Jadeja Rajput by caste, and belongs to the same family as the Rao of Cutch. The Jadejas originally entered Kathiawar from Cutch, and dispossessed the ancient family of Jethwas then established at Ghumli. The town of Jamnagar was founded in 1540. The present Jam Sahib is the well-known cricketer, H. H. Jam Sahib Shri Ranjitsinhji Vibhaji, who was born in 1872 and succeeded in 1907. The principal products are grain, cotton and oil-seeds, shipped from the ports of the State. A small pearl fishery lies off the coast. The State pays a tribute of Rs. 1,20,093 per annum jointly to the British Government, the Gaekwar of Baroda and the Nawab of Junagadh. The State maintains two squadrons of Nawanagar State Lancers. The Capital is Jamnagar, a flourishing place, nearly 4 miles in circuit, situated 5 miles east of the port of Bedi. Population 345,353. Revenue nearly Rs. 80 lakhs.

Revenue Secretary: Gokulbhai B. Desai, Bar.-at-law.

Political Secretary: Parshuram B. Junnarkar, B.A., LL.B.

General Secretary: Hirabhai M. Mehta, B.A. (Cantab.), Bar.-at-law.

Cutch.—The State is bounded on the north and north-west by Sind, on the east by the Palanpur Agency, on the south by the Peninsula of Kathiawar and the Gulf of Cutch and the south-west by the Indian Ocean. Its area, exclusive of the great salt marsh called the Rann of Cutch, is 7,616 square miles. The capital is Bhuj, where the ruling Chief (the Maharao) His Highness Maha Rao Sri Khengarji Savai Bahadur, G.C.S.I., G.C.I.E., resides. From its isolated position, the special character of its people, their peculiar dialect, and their

strong feeling of personal loyalty to their ruler, the peninsula of Cutch has more of the elements of a distinct nationality than any other of the dependencies of Bombay. The earliest historic notices of the State occur in the Greek writers. Its modern history dates from its conquest by the Sind tribe of Samma Rajputs in the fourteenth century. The section of the Sammas forming the ruling family in Cutch were known as the Jadejas or 'children of Jada'. The British made a treaty with the State in 1815. There is a fair proportion of good arable soil in Cutch, and wheat, barley and cotton are cultivated. Both iron and coal are found but are not worked. Cutch is noted for its beautiful embroidery and silverwork and its manufactures of silk and cotton are of some importance. Trade is chiefly carried by sea. The ruling chief is the supreme authority. A few of the Bhayats are invested with jurisdictional powers in varying degrees in their own Estates and over their own ryots. A notable fact in connection with the administration of the Cutch State is the number and position of the Bhayat. These are Rajput nobles forming the brotherhood of the Rao. They were granted a share in the territories of the ruling chief as provision for their maintenance and are bound to furnish troops on an emergency. The number of these chiefs is 137, and the total number of the Jadeja tribe in Cutch is about 16,000. The British military force having been withdrawn from Bhuj, the State now pays Rs. 82,257 annually as an Anjar equivalent to the British Government. The military force consists of about 1,000 in addition to which, there are some irregular infantry, and the Bhayats could furnish on requisition a mixed force of four thousand.

Palanpur Agency.—This group of States in Gujarat comprises two first class States, Palanpur and Radhanpur, and a few minor States and petty talukas. Its total area is 6,393 square miles and the population is 518,566. The gross revenue is about 27 lakhs. The territory included in the Agency has, like the more central parts of Gujarat, passed during historical times under the sway of the different Rajput dynasties of Anhilvada, the early Khilji and Tughlak Shahi dynasties of Delhi, the Ahmedabad Sultans, the Mughal Emperors, the Mahrattas, and lastly the British. The State from which the Agency takes its name is under the rule of Captain His Highness Zubda-tul-Mulk Dewan Mahakhan Taley Muhammad Khan Bahadur, K.C.I.E., K.C.V.O., Nawab of Palanpur. His Highness is descended from the Usafzai Lohani Pathan, an Afghan tribe who appeared in Gujarat in the 14th century. The connection of the British Government with the State dates from 1819 in which year the Ruler was murdered by a body of nobles. Two high roads from Ahmedabad pass through the State and a considerable trade in cloth, grain, sugar and rice is carried on. The State pays tribute of Rs. 38,462 to the Gaekwar of Baroda. The capital is Palanpur situated on the B. B. & C. I. Railway, and is the junction station of the Palanpur-Deesa Branch of B. B. & C. I. Railway. It is a very old settlement of which mention was made in the 8th century.

Radhanpur is a first-class State, with an area of 1,150 square miles, which is held by a branch of the illustrious Babi family, who since the reign of Humayun have always been prominent in the annals of Gujarat. The present chief is H. H. Jalalud-din Khanji, the Nawab of Radhanpur. The State maintains a Police force of 209. The principal products are cotton, wheat and grain. The capital is Radhanpur town, a considerable trade centre for Northern Gujarat and Cutch. Sami has a cotton press and three ginning factories. There is one ginning factory at Munjpur and 1 at Lolada.

STATES IN THE BOMBAY PRESIDENCY.

The territories under the rule of Indian Princes and Chiefs in the Bombay Presidency extend over an area of 28,039 square miles. The characteristic feature of the Bombay States is the great number of petty principalities. The recognition of these very numerous jurisdictions is due to the circumstance that the early Bombay administrators were induced to treat the *de facto* exercise of civil and criminal jurisdiction by a landholder as carrying with it a quasi-sovereign status. In no part of India is there a greater variety of principalities. Some of the largest are of modern origin, having been founded by the Marathas in the general scramble for power in the middle of the 18th century but the Rajput houses in the Gujarat Agencies date from earlier times. Interesting traces of ancient history are to be found at Sachin and Janjira, where Chiefs of foreign ancestry, descended from Abyssinian admirals of the Deccan fleets, still remain. A few aboriginal Chiefs-Bhils or Kolis exercise very limited authority in the Dangs and the hilly country that fringes the Mahi and the Narbada rivers.

The variety of the relations which under the terms of the several treaties, subsist between the British Government and the rulers of the different States, and the general superintendence exercised by Government as the Paramount Power, necessitate the presence of an Agent or representative of Government at the Principal Courts. The smaller and less important States are either grouped together under the general supervision of a Political Agent or are looked after by the Collectors of the districts which they adjoin. The position of the Agent varies, roughly speaking, with the importance of the State. In some cases he does little more than give advice and exercise a general surveillance. In other cases the Agents are invested with a direct share in the administration, while States the Rulers of which are minor are directly managed by Government Officers or under arrangements approved by Government. Some of the States are subordinate to other States and not in direct relations with the British Government. In these cases the status of the feudatories is usually guaranteed by Govern-

ment. The powers of the Chiefs are regulated by treaty or custom, and range downwards to a mere right to collect revenue in a share of a village, without criminal or civil jurisdiction, as in the case of the petty Chiefs in the Mahi Kantha and Rewa Kantha Agencies.

The number of Indian States in the Bombay Presidency is 151, with an area of 28,039 square miles and population (1921) of 3,879,095. They are divided for administrative purposes into the following Agencies: Belgaum Agency, Savantvadi; Bijapur Agency, Jath: Dharwar Agency, Savanur: Kaira Agency, Cambay: Kolaba Agency, Janjira: Kolhapur Residency and Southern Maratha Country States Agency, 9 States (Kolhapur with 9 feudatories), Jamkhandi, Kurundwad Senior, Kurundwad Junior, Miraj Senior, Miraj Junior, Mudhol, Ramdurg and Sangli): Mahi Kantha Agency 51 States (principal States Idar and Danta): Nasik Agency Surgana: Poona Agency, Bhor: Rewa Kantha Agency, 62 States (principal States; Balasinor, Baria, Chhota Udeipur, Lunawada, Rajpipla and Sant): Satara Agency, Aundh and Phaltan: Sholapur Agency, Akalkot: Sukkur Agency, Khairpur: Surat Agency, 3 States (Bansda, Dharampur and Sachin) and 14 Dang Chiefs: Thana Agency, Jawhar. The table below gives details of the area of the more important States:—

State.	Area in sq. miles.	Population (in 1921).	Approximate Revenue.
			Rs.
Balasinor ..	189	44,030	2,51,000
Bansda ..	215	40,125	8,03,973
Baria	813	137,291	8,26,000
Bhor	925	130,420	6,00,000
Cambay ..	350	71,715	9,00,860
Chhota Udeipur	890	125,702	12,41,000
Danta	347	19,541	1,87,700
Dharampur ..	704	95,171	12,53,560
Idar	1,669	226,355	13,22,300
Janjira ..	324	87,534	6,65,000
Jawhar ..	310	49,662	6,06,000
Khairpur ..	6,050	193,152	21,33,886
Kolhapur ..	3,217	833,726	1,12,71,000
Lunawada ..	388	83,133	7,75,000
Mudhol ..	368	60,140	4,72,000
Rajpipla ..	1,517	168,454	25,58,000
Sachin ..	49	19,977	4,12,000
Sangli	1,136	221,321	12,40,000
Savantvadi ..	925	206,440	7,76,830
Sant	394	70,957	5,77,000

Bijapur Agency.—This comprises the Satara Jaghir of Jath (980·8 square miles in area). On the annexation of Satara, in 1849, Jath and Daphlapur like other Satara Jaghirs, became feudatories of the British Government. The latter has more than once interfered to adjust the pecuniary affairs of the Jath Jaghir and in consequence of numerous acts of oppression on the part of the then ruler was compelled to assume direct management from 1874 to 1885. The small estate of Daphlapur with an area of 96·8 square miles lapsed to the Jath Jaghir on the demise of its last ruler Ranibai Saheb Daphle in January 1917. The Chief of Jath who belongs to the Mahratta caste, ranks as a first class Sardar. He holds a sanad of adoption, and the succession follows the rule of primogeniture. The gross revenue of the State is about 3 lakhs chiefly derived from land revenue. The Jath State pays to the British Government Rs. 6,400 per annum in lieu of horse contingent and Rs. 4,847 on account of Sardeshmukhi rights.

Political Agent.—V. H. Naik, M. A., Bar-at-Law, Collector of Bijapur.

Dharwar Agency.—This comprises only the small State of Savanur. The founder of the reigning family who are Mahomedans of Pathan origin was a Jagirdar of Emperor Aurangzeb. At the close of the last Maratha War the Nawab of Savanur, whose conduct had been exceptionally loyal, was confirmed in his possessions by the British Government. The State pays no tribute. The principal crops are jowari and cotton. The area is 70 square miles and population 16,830. The revenue is Rs. 2,15,764-11-7. The present chief is Captain Meherban Nawab Abdul Majid Khan Diler Jang Bahadur, Nawab of Savanur.

Political Agent: A. Master, I.C.S.

Kaira Agency.—This includes only the State of Cambay at the head of the Gulf of the same name. Cambay was formerly one of the chief ports of India and of the Anhilvada Kingdom. At the end of the thirteenth century it is said to have been one of the richest towns in India: at the beginning of the sixteenth century also it formed one of the chief centres of commerce in Western India. Factories were established there by the English and the Dutch. It was established a distinct State about 1730, the founder of the present family of Chiefs being the last but one of the Mahomedan Governors of Gujarat. The present Nawab is His Highness Mirza Hussein Yawar Khan who is a Shiah Mogul of the Najumisani family of Persia, and was born on the 16th May 1911. His father, the late Nawab Jaffar Ali Khan, died on 21st January 1915, leaving him a minor. The State is therefore under British Administration. The State pays a tribute of Rs. 21,924 to the British Government. Wheat and cotton are the principal crops. There is a broad gauge line from Cambay *via* Petlad, connecting with the B. B. & C. I. Railway at Anand. Cambay is a first class State having full jurisdiction. Revenue is about eight lakhs. The area of the State is 350 square miles, population 71,715.

Political Agent: M. S. Jayakar, M.A.

Administrator: V. K. Namjoshi.

Mahi Kantha.—This group of States has a total area of 3,124 square miles and a population of 450,478, including that of **Idar**, which is 226,351. The revenue is about 14 lakhs. The Agency consists of the first class State of Idar and 51 small States. Idar covers more than half the territory. It has an area of 1,668 square miles and an average revenue of Rs. 16,47,379. The present Ruler of Idar, Lieutenant-Colonel H. H. Maharaja Sir Dowlat Singhji, K.C.S.I., is a Rajput of the Rathod clan. He was born in 1878 and ascended the Gadi in 1911. His Highness had been on active service in Egypt during the great war. The subordinate feudatory Jagirdars are divided into 3 classes. The Jagirdars comprised in the class of Bhayats are cadets of the Ruling House to whom grants have been made in maintenance or as a Jivarak. Those known as Sardar Pattawats are descendants of the military leaders who accompanied Anand Singh and Rai Singh, the founder of the present Marwar dynasty when they took possession of the State in the first quarter of the eighteenth century and to whom grants of land were made by Maharaja Anand Singh in 1741 A. D. on condition of military service. In the class of the Bhoomias are included all subordinate Feudatories who were in possession of their Pattas prior to the advent of the present Marwar dynasty. The Pattas which they hold were acquired by their ancestors by grant from the former Rao rulers of the State. The Maharaja receives Rs. 52,427 annually on account of Khichdi and other Raj-Haks from its subordinate Sardars, the tributary Talukas of the Mahi Kantha Agency and others and pays Rs. 30,340 as Ghasdana to Gaekwar of Baroda through the British Government. Of the smaller states Polo and Danta are two important second class States. The names of their Chiefs are Rao Shri Hamir Singhji and Maharana Shri Bhawani Singhji. Nine other States are of some importance and the remainders are estates belonging to Rajput or Koli Thakurs, once the lawless feudatories of Baroda and still requiring the close supervision of the Political Officer.

Political Agent—Major J. De La Hay Gordon, O.B.E., M.C.

Nasik Agency.—This consists of one State Surgana, lying in the north-west corner of the Nasik District. Surgana has an area of 360 square miles and a population of 14,912. The ruling chief is Prataprao Shankarrao Deshmukh, who is descended from a Maratha Pawar family. He rules the State subject to the general control of the Collector and Political Agent Nasik. The revenue of the State is Rs. 66,893

Rewa Kantha Agency.—This Agency, with an area of 4,956 square miles and a population of 665,099, comprises 61 States, of which Rajpipla is a first class State, 5 are second class, one is third class and the rest are either petty States or talukas. Among those petty States are Sanjeli in the north, Bhadarva and Umeta in the west, Jambhughoda in the south-east, and two groups of Mehwas. The 26 Sankheda Mehwas petty estates lie on the right bank of the Narbada, while the 24 Pandu Mehwas petty estates including Dodka, Anghad and Raika, which together form the Dodka Mehwas are situated on the border of the Mahi.

The following are the statistics of area and population for the principal States:—

State.	Area in square miles.	Population.
Balasinor	189	44,039
Bariya	813	137,291
Chhota Udaipur	873	125,702
Lunavada	388	83,136
Narukot (Jambhughoda) ..	143	9,540
Rajpipla	1,517	168,425
Sunt	394	70,957
Other Jurisdictional States, Civil Stations and Thana Circles	639	113,977

Under the first Anhilvada dynasty (746-961) almost all the Rewa Kantha lands except Champaner were under the government of the Bariyas, that is, Koli and Bhil chiefs. In the eleventh, twelfth and thirteenth centuries chiefs of Rajput or part Rajput blood, driven south and east by the pressure of Muhammadan invasions, took the place of the Koli and Bhil leaders. The first of the present States to be established was the house of the Maharaja of Rajpipla, a Gohel Rajput.

Rajpipla.—This State lies to the south of the Narbada. It has an area of 1,517½ square miles. The lands are rich and very fertile and except a few forest-clad hills are suitable and available for cultivation in large quantities in the south-east talukas. The family of the Maharaja of Rajpipla, Captain H. H. Maharana Shri Sir Vijayasinjhi, K.C.S.I., is said to derive its origin from a Rajput of the Gohel clan. Cotton is the most important crop in the State. In the hills there are valuable teak forests. The capital is Rajpipla which is connected with Anklesvar by railway built by the State.

Satara Jahagirs.—Under this heading are grouped the following States:—

State.	Area in sq. miles.	Population.	Revenue in lakhs.
			Rs.
Aundh	501	64,560	3
Phaltan	397	43,286	3
Bhor	925	130,420	5
Akalkot	498	81,250	9
Jath	981	82,654	3½

Kolaba Agency.—This Agency includes the State of **Janjira** in the Konkan, a country covered with spurs and hill ranges and much intersected by creeks and backwaters. The ruling family is said to be descended from an Abyssinian in the service of one of the Nizam Shahi Kings of Ahmednagar at the end of the fifteenth century. The most noticeable point in its history is the successful resistance that it alone, of all the States of Western India, made against the determined attacks of the Marathas. The British, on succeeding the Marathas as masters of the Konkan, refrained from interfering in the internal administration of the State. The chief is a Sunni Mahomedan; by race a Sidi or Abyssinian, with a title of His Highness the Nawab. He has a sanad guaranteeing succession according to Mahomedan law and pays no tribute. Till 1868 the State enjoyed singular independence, there being no Political Agent, and no interference whatever in its internal affairs. About that year the maladministration of the chief, especially in matters of police and criminal justice, became flagrant; those branches of administration were in consequence taken out of his hands and vested in a Political Agent. The last ruler, H. H. Nawab Sidi Sir Ahmed Khan, G.C.I.E., died on 2nd May 1922, and was succeeded by his son Sidi Muhammad Khan, born on the 7th March 1914. The area of the State is 377 square miles, and the population 98,530. The average revenue is 8 lakhs, including that derived from a small dependency named Jafferabad in the south of Kathiawar under the Kathiawar Agency. The State maintains an irregular military force of 231. The capital is Murud on the main land, the name of Janjira being retained by the island fort opposite. The Chief is entitled to a dynastic salute of 11 guns. In recognition of services rendered in connection with the war the last ruler's salute was raised on the 1st January 1918 to 13 guns personal and 13 permanent within the limits of his own State from the 1st January 1921. The State is now under a minority administration with the minor Nawab's mother as Regent, assisted by a Dewan appointed with the approval of Government. The present Dewan is Mr. P. R. Kapadia, B.A., a retired Deputy Collector.

Kolhapur Agency.—Kolhapur is a State with an area of 3,217 square miles and population of 833,726. Subordinate to Kolhapur are nine feudatories, of which the following four are important: Vishalgarh, Bavda, Kagal (senior), and Ichalkaranji. The ruling house traces its descent from a younger son of Shivaji, founder of the Maratha power. The prevalence of piracy from the Kolhapur port of Malvan compelled the Bombay Government to send expeditions against Kolhapur in 1765, and again in 1792, when the Raja agreed to give compensation for the losses which British merchants had sustained since 1785, and to permit the establishment of factories at Malvan and Kolhapur. Internal dissensions and wars with neighbouring States gradually weakened the power of Kolhapur. In 1812 a treaty was concluded with the British Government, by which, in return for the cession of certain ports, the Kolhapur Raja was guaranteed against the attacks of foreign powers; while on his part he engaged to abstain from hostilities with other States, and to refer all disputes to the arbitration of the British Government. The principal articles of production are rice, joowar and sugar-cane and the manufactures are coarse cotton and woollen cloths, pottery and hard ware. The State pays no tribute, and supports a military force of 692. The nine feudatory estates are administered by their holders, except in the case of two whose holders are minors. Kolhapur proper is divided into seven pethas or talukas and three mahals and is managed by the Maharaja, who has full powers of life and death. The Southern Mahratta Railway passes through the State and is connected with Kolhapur City by a line which is the property of the State.

Resident and Senior Political Agent for Kolhapur and the Southern Mahratta Country.—Major L. E. Lang, C. I. E., M. C.

Southern Maratha Country States.—The Agency consists of the following eight States:—

Name of State.	Area in square miles.	Population.	Tribute to British Government.	Average revenue.
			Rs.	Rs.
Sangli	1,136	221,321	1,35,000	13,60,872
Miraj (Senior)	342	82,580	12,558	4,31,204
Miraj (Junior)	196½	34,665	7,389	3,52,382
Kurundwad (Senior)	182⅘	38,760	9,619	3,56,250
Kurundwad (Junior)	114	34,288	....	2,70,928
Jamkhandi	524	101,195	20,516	9,44,310
Mudhol	368	60,140	2,672	4,80,599
Ramdurg	169	33,997	....	3,69,483
Total ..	3,032	606,946	1,87,754	45,66,028

Mahi Kantha.—This group of States has a total area of 3,124 square miles and a population of 450,478, including that of **Idar**, which is 226,351. The revenue is about 14 lakhs. The Agency consists of the first class State of Idar and 51 small States. Idar covers more than half the territory. It has an area of 1,668 square miles and an average revenue of Rs. 16,47,379. The present Ruler of Idar, Lieutenant-Colonel H. H. Maharaja Sir Dowlat Singhji, K.C.S.I., is a Rajput of the Rathod clan. He was born in 1878 and ascended the Gadi in 1911. His Highness had been on active service in Egypt during the great war. The subordinate feudatory Jagirdars are divided into 3 classes. The Jagirdars comprised in the class of Bhayats are cadets of the Ruling House to whom grants have been made in maintenance or as a Jivarak. Those known as Sardar Pattawats are descendants of the military leaders who accompanied Anand Singh and Rai Singh, the founder of the present Marwar dynasty when they took possession of the State in the first quarter of the eighteenth century and to whom grants of land were made by Maharaja Anand Singh in 1741 A. D. on condition of military service. In the class of the Bhoomias are included all subordinate Feudatories who were in possession of their Pattas prior to the advent of the present Marwar dynasty. The Pattas which they hold were acquired by their ancestors by grant from the former Rao rulers of the State. The Maharaja receives Rs. 52,427 annually on account of Khichdi and other Raj-Haks from its subordinate Sardars, the tributary Talukas of the Mahi Kantha Agency and others and pays Rs. 30,340 as Ghasdana to Gaekwar of Baroda through the British Government. Of the smaller states Polo and Danta are two important second class States. The names of their Chiefs are Rao Shri Hamir Singhji and Maharana Shri Bhawani Singhji. Nine other States are of some importance and the remainders are estates belonging to Rajput or Koli Thakurs, once the lawless feudatories of Baroda and still requiring the close supervision of the Political Officer.

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State.	Area in sq. miles.	Population.	Revenue in lakhs.
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Phaltan	397	43,286	3
Bhor	925	130,420	5
Akalkot	498	81,250	9
Jath	981	82,654	3½

These were formerly feudatory to the Raja of Satara. In 1849 five of them, including the Daflapur Estate, which has since reverted to the Jath State, were placed in relations with the Collector of Satara, and Akalkot with the Collector of Sholapur. Subsequently, the Jahagir of Bhor was transferred to the Collector of Poona, and Jath to the Agency for the Southern Mahratta Country States. The latter has since been placed in relation with the Collector of Bijapur. The ruling Chiefs are as follows:—

State.	Ruling Chiefs.	Tribute to British Government.
		Rs.
Aundh	Meherban Bhavanrao Shrinivasrao *alias* Bala Saheb, Pant Pratinidhi.	....
Phaltan	2nd-Lieutenant Meherban Malojirao Mudhojirao *alias* Nana Saheb Naik Nimbalkar.	9,600
Bhor	Meherban Raghunathrao Shankarrao *alias* Baba Saheb, Pant Sachiv.	4,684
Akalkot	Meherban Shrimant Vijayasinh Fatehsinh Raje Bhonsle Raje Saheb of (minor).	14,592
Jath	Meherban Ramrao Amritrao *alias* Aba Saheb Dafle	10,129

Sawantwadi.—This State has an area of 925 square miles and population of 206,440. The average revenue is Rs. 7,76,820. It lies to the north of the Portuguese territory of Goa, the general aspect of the country being extremely picturesque. Early inscriptions take the history of the State back to the sixth century. So late as the nineteenth century the ports on this coast swarmed with pirates and the country was very much disturbed. The present Chief is Khem Sawant V *alias* Bapu Saheb Bhonsle. Rice is the principal crop of the State, and it is rich in valuable teak. The sturdy Marathas of the State are favourite troops for the Indian Army and supply much of the immigrant labour in the adjacent British districts. The Capital is Sawantwadi, also called Sundar Wadi, or simply Wadi.

Sholapur Agency.—This contains the State of Akalkot which forms part of the table land of the Deccan. It has an area of 498 square miles and a population of 81,250. In the beginning of the eighteenth century the Akalkot territory, which had formerly been part of the Mussulman kingdom of Ahmednagar, was granted by the Raja of Satara to a Maratha Sardar, the ancestor of the present chief, subject to the supply of a contingent of horse. In 1849 after the annexation of Satara, the Akalkot Chief became a feudatory of the British Government.

Baria.—The State has an area of 813 square miles with a population of 137,291 and is situated in the heart of the Panchmahals district. The Capital Devgad Baria is reached by road from Piplod station on the B. B. & C. I. Railway, at a distance of eight miles. The average revenue of the State is about 10 lakhs. The State enjoys plenary powers. The Ruler Captain His Highness Maharaol Shree Sir Ranjitsinhji, K.C.S.I., is the direct descendant of the Great House of Kichhi Chowhan Rajputs who ruled over Gujrat for 244 years with their capital at Champaner, with the proud title of Pavapatis. His family has the noblest historical traditions. The State pays no tribute either to the British Government or any other Indian State. He enjoys a salute of eleven guns. He served in France and Flanders in the Great European War and in the Afghan War, 1919. The staple crop is maize. The forests are rich in teakwood and all sorts of jungle produce. There is a large scope for forest industries.

The Sukkur Agency.—This consists of the Khairpur State, a great alluvial plain in Sind. It has an area of 6,050 square miles and a population of 193,152, and revenue of over 26 lakhs. The present chief, H. H. Mir Ali Nawaz Khan, belongs to a Baloch family called Talpur. Previous to the accession of this family on the fall of the Kalohra dynasty of Sind in 1783, the history of Khairpur belongs to the general history of Sind. In that year Mir Fateh Ali Khan Talpur established himself as Rais or ruler of Sind; and subsequently his nephew, Mir Sohrab Khan Talpur, founded the Khairpur branch of the Talpur family. In 1832 the individuality of the Khairpur State, as separate from the other Talpur Mirs in Sind, was recognised by the British Government in a treaty, under which the use of the river Indus and the roads of Sind were secured to the British. The chief products of the State are oil-seeds, ghee, hides, tobacco, fuller's earth, carbonate of soda, cotton, wool and grain. The manufactures comprise cotton fabrics and various kinds of silverware and metal work. There is an industrial school at the capital where lacquer work, carpets, pottery, etc., are produced. The Railway from Hyderabad to Rohri runs through the whole length of the State. The rule of the Mirs has all along been patriarchal until very recently when the present Ruler, Mir Ali Nawaz Khan Talpur, an educated

and enlightened prince, last year turned a new leaf in the administration of the State and replaced the old Vazarat system by a Council of three members, he being the President. The State supports a Military Force of 330 rank and file, composed of 216 Infantry, 72 Transport and 42 Band and Bag-pipes, including an Imperial Service Camel and Baggage Corps, which is 139 strong and served at the Front.

Political Agent: The Collector of Sukkur.

Surat Agency.—This is a small group of three second class States under the Political Agent, Surat.

State.	Ruling Chiefs.	Area in sq. miles.	Population (1921).
Dharampur ..	Maharana Shri Vijayadevji Mohandevji	704	95,171
Bansda ..	Maharaval Shri Indrasinhji Pratapsinhji	215	40,125
Sachin ..	His Highness Nawab Sidi Ibrahim Muhammad Yakut Khan Mubariqud Nasrat Daula Nasrat Jung Bahadur.	49	19,977

The joint revenue of these States is Rs. 24,64,000. Tribute is paid to the British Government of Rs. 9,154. There is also attached to this Agency a tract of country known as the Dangs, which has an area of 653 square miles and a population of 24,576 and a revenue of Rs. 24,711. The country is divided into 14 Dangs or States of very unequal area, each under the purely nominal rule of a Bhil Chief with the title of Raja, Naik, Pradhan or Povar.

Thana Agency.—This includes the State of Jawhar, in the Thana District, on a plateau above the Konkan plain. It has an area of 310 square miles and a population of 49,662 and revenue of 5,81,273. Up to 1294, the period of the first Mahomedan invasion of the Deccan, Jawhar was held by a Varli, not a Koli chief. The first Koli chief obtained his footing in Jawhar by a device similar to that of Dido, when he asked for and received as much land as the hide of a bull would cover. The Koli chief cut a hide into strips, and thus enclosed the territory of the State. The present chief is Raja Patangsha *alias* Yeshwantrao Vikramsha, who is a minor and hence the State under British administration.

UNDER THE GOVERNMENT OF BENGAL.

Cooch Behar.—This State, which at one time comprised almost the whole of the Northern Bengal, Assam and a part of Bhutan now known as the Duars, is a low-lying plain in North Bengal. It has an area of 1,307 square miles, a population of 592,989 and a revenue of nearly 42 lakhs. By the demise of the late Maharaja His Highness Maharaja Sir Jitendra Narayan Bhup Bahadur in December 1922 in England, his eldest son Yuvaraj Kumar Jagaddipendra Narayan (born on December 15, 1915) succeeded to the gadi at the age of 7, which necessitated a minority administration under the guidance of a Regent. His Highness the Maharaja belongs to the Kshatriya Varna of Kshatriya origin. The present Maharaja has three sisters Maharajkumaris Ila Devi (aetat 14), Ayesha Devi (aetat 9) and Menaka Devi (aetat 8) and one brother Maharajkumar Indrajit Narayan (aetat 10). Her Highness the Maharani Sahiba of Cooch Behar was appointed Regent under the wishes of the late Maharaja and administers the State on behalf of her minor son with a Council of Regency, comprising four members at present, of which Her Highness is the President. Cooch Behar once formed part of the famous kingdom of Kamrup. British connection with it began in 1772 when owing to inroads of the Bhutias, the assistance of the East India Company was invoked. The chief products of the State are rice, jute, mustard seed and tobacco. The capital is Cooch Behar, which is reached by the Cooch Behar State Railway, a branch of the Eastern Bengal State Railway System.

Tripura.—This State lies to the east of the district of Tippera and consists largely of hills covered with dense jungles. It has an area of 4,116 square miles and a population of 304,437. The revenue from the State is about 17 lakhs and from the Zemindaries in British India is about 13 lakhs. The present Ruler is Maharaja Manikya Bir Bikram Kishore Deb Barman Bahadur, who is a Kshatriya by caste and come of the Lunar race. He was born on 19th August 1908 and he is entitled to a salute of 13 guns. He succeeded the late Maharaja Manikya Birendra Kishore Deb Barman Bahadur on 13th August 1923. The Military prestige of Tripura dates back to the fifteenth century and a mythical account of the State takes the history to an even earlier date. Both as regards its constitution and its relations with the British Government, the State differs alike from the large Native States of India, and from those which are classed as tributary. Besides being the Ruler of Tripura, the Maharaja also holds a large landed property situated in the plains of the Districts of Tippera, Noakhali and Sylhet. This estate covers an area of 600 square miles, and is held to form with the State an indivisible Raj. Disputes as to the right of succession have occurred on the occasion of almost every vacancy

in the *gadi* producing in times gone by disturbances and domestic wars, and exposing the inhabitants to serious disorders and attacks from the Kukis, who were always called in as auxiliaries by one or other of the contending parties. The principles which govern succession to the State have recently, however, been embodied in a *sanad* which was drawn up in 1904. The chief products of the State are rice, cotton, til, tea and forest produce of various kinds, the traffic being carried chiefly by water. The Maharaja received full administrative powers on 19th August 1927. The State courts are authorised to inflict capital punishment.

Political Agent:—Magistrate and Collector of Tippera (Ex-officio.)

UNDER THE GOVERNMENT OF BIHAR AND ORISSA.

Under this Government there are the Chota Nagpur Feudatory States of Kharsawan and Seraikela, and the Orissa Feudatory States, 24 in number. The total area is 28,656 square miles, and the total population 3,959,669. The average revenue is Rs. 98,92,191. The inhabitants are hill-men of Kolarian or Dravidian origin and their condition is still very primitive. The Chief of **Kharsawan** belongs to a junior branch of the Porahat Raja's family. The State first came under the notice of the British in 1793, when, in consequences of disturbances on the frontier of the old Jungle Mahals, the Thakur of Kharsawan and the Kunwar of Saraikela were compelled to enter into certain agreements relating to the treatment of fugitive rebels. The Chief is bound, when called upon, to render service to the British Government, but he has never had to pay tribute. His present sanad was granted in 1919. He exercises all administrative powers, executive and judicial, subject to the control of the Political Agent and Commissioner, Orissa Feudatory States. The Bengal Nagpur Railway runs through a part of the State. The adjoining State of Seraikela is held by the elder branch of the Porahat Raja's family.

Orissa Feudatory States.—This group of 24 dependent territories is situated between the Mahanadi Delta and the Central Provinces, and forms the mountainous background of Orissa. The names of the individual States are Athgarh, Talcher, Mayurbhanj, Nilgiri, Keonjhar, Pal Lahara, Dhenkanal, Athmallik, Hindol, Narsinghpur, Baramba, Tigiria, Khanpara, Nayagarh, Ranpur, Daspalla and Baud. To these there were added in 1905 the following States: Bamra, Rairakhol, Sonpur, Patna and Kalahandi from the Central Provinces, and Gangpur and Bonai from the Chota Nagpur States. The total population is 3,807,172 with an average revenue of Rs. 94,50,039. The Feudatory States have no connected or authentic history. Comprising the western and hilly portion of the province of Orissa they were never brought under the central government, but from the earliest times consisted of numerous petty principalities which were more or less independent of one another. They were first inhabited by aboriginal races, who were divided into innumerable communal or tribal groups each under its own chief or headman. These carried on incessant warfare with their neighbours on the one hand and with the wild beasts of the forests on the other. In course of time their hill retreats were penetrated by Aryan adventurers, who gradually overthrew the tribal chiefs and established themselves in their place. Tradition relates how these daring interlopers, most of whom were Rajputs from the north, came to Puri on a pilgrimage and remained behind to found kingdoms and dynasties. It was thus that Jai Singh became ruler of Mayurbhanj over 1,300 years ago, and was succeeded by his eldest son, while his second son seized Keonjhar. The Chiefs of Baud and Daspalla are said to be descended from the same stock; and a Rajput origin is also claimed by the Rajas of Athmallik, Narsinghpur, Pal Lahara, Talcher and Tigiria. Nayagarh, it is alleged, was founded by a Rajput from Rewah, and a scion of the same family was the ancestor of the present house of Khandpara. On the other hand, the chiefs of a few States, such as Athgarh, Baramba and Dhenkanal, owe their origin to favourites or distinguished servants of the ruling sovereigns of Orissa. The State of Ranpur is believed to be the most ancient, the list of its chiefs covering a period of over 3,600 years. It is noteworthy that this family is of Khond origin, and furnishes the only known instance in which, amid many vicissitudes, the supremacy of the original settlers has remained intact. The States acknowledged the suzerainty of the paramount power and were under an implied obligation to render assistance in resisting invaders; but in other respects neither the ancient kings of Orissa nor their successors, the Mughals and Marathas, ever interfered with their internal administration. All the States have annals of the dynasties that have ruled over them; but they are made up in most part of legend and fiction and long genealogical tables of doubtful accuracy, and contain very few features of general interest. The British conquest of Orissa from the Marathas, which took place in 1803, was immediately followed by the submission of ten of the Tributary States, the Chiefs of which were the first to enter into treaty engagements.

The States have formed the subject of frequent legislation of a special character. They were taken over from the Marathas in 1803 with the rest of Orissa; but, as they had always been tributary states rather than regular districts of the native governments, they were exempted from the operation of the general regulation system. This was on the ground of expediency only and it was held that there was nothing in the nature of British relations with the proprietors that would preclude their being brought under the ordinary jurisdiction of the British courts, if that should ever be found advisable. In 1882 it was held that the States did not form part of British India and this was afterwards accepted by the Secretary of State.

The staple crop in these States is rice. The forests in them were at one time among the best timber producing tracts in India, but until lately forest conservancy was practically

unknown. The States have formed the subject of frequent legislation of a special character. The relations with the British Government are governed by sanads which, in the case of Gangpur and Bonai, were last revised in 1919. and in the case of the others in 1915. They recite the rights, privileges, duties and obligations of the Chiefs, providing for the settlement of boundary disputes, and indicating the nature and extent of the control of the Political Agent and Commissioner.

Political Agent and Commissioner: J. E. Scott, O.B.E.

UNDER THE GOVERNMENT OF THE UNITED PROVINCES.

Three States: Rampur, Tehri and Benares are included under this Government:—

State.	Area Sq. Miles.	Population.	Revenue in lakhs of Rupees.
Rampur ..	892	453,607	54
Tehri (Garhwal)	4,500	318,482	14
Benares ..	875	362,735	22

Rampur State.—The State of Rampur was founded by Nawab Sayed Ali Mohammad Khan Bahadur in the middle of the 18th century and his dominions included a considerable portion of what is now known as Rohilkhand. The founder belonged to the famous Sayeds of the Bareha clans in the Muzaffarnagar district and was a statesman of remarkable ability. He rendered invaluable services to the Moghal Emperor who recognised him as Ruler of Rohilkhand.

Upon his death, his Kingdom underwent many vicissitudes and was considerably reduced in size during the reign of his son Nawab Sayed Faizulla Khan Bahadur. The Province of Rohilkhand had now passed into the hands of the East India Company. Nawab Sayed Faizulla Khan Bahadur was most loyal and true to the British Government to whom he always looked up for help during those unsettled days and he gave tangible proof of his loyalty when during the war against France he offered all his cavalry 2,000 strong to the British Government in 1878 and received the following message of thanks from the then Governor-General :—

"That in his own name as well as that of the Board, he returned him the warmest thanks for this instance of his faithful attachment to the Company and the "English Nation."

Another opportunity arose for the ruler of Rampur to evince his steadfast loyalty and devotion to the Imperial Cause on the outbreak of the Mutiny of 1857. His Highness Nawab Sir Sayed Yusuf Ali Khan Bahadur occupied the Musnad of Rampur in those days. From the very start till peace was re-established in the country, he was lavish in his expenditure of men and money on the side of the British Government: he fought their battles, saved the lives of many Europeans whom he provided with money and other means of comfort and had so much established his reputation as a good administrator that he was placed in charge of the Moradabad district. These signal services were recognised by the Government by the grant of an Illaqa besides other marks of distinction.

The reign of the present ruler His Highness Nawab Sir Sayed Mohammad Hamid Ali Khan Bahadur stands out unique in many ways. Rampur has made great strides in trade and commerce, and in fact in every walk of life. His Highness takes keen interest in education and has not only contributed handsome donations but makes annual grants to the various educational institutions.

He is no whit behind his compatriots in his loyalty to the British Government. The great War of 1914 found him foremost in offering his personal services and all the resources of his State—men, money and material—to the British Government. The Rampur I. S. Infantry was sent to East Africa and returned home after nearly four years' service and won the favourable remarks of high British Officers. The Rampur Lancers also performed their allotted duties in the War. Besides the expenditure involved in this, His Highness also participated in the scheme of the Hospitalship "Loyalty" and contributed a lakh rupees towards the cost and upkeep of it. His other contributions to the various funds amount to over half a lakh of rupees and he also subscribed Rs. 7,00,000 to the two War Loans. These are some of the principal contributions made by His Highness towards the Imperial cause in the War. Afghan War of 1919 again found him prompt in his offer of assistance. This time the I.S. Lancers and the Imperial Service Infantry were sent on garrison duty in British India.

His Highness is a Knight Grand Commander of the Most Exalted Order of the Star of India and of the most Eminent Order of the Indian Empire, Knight Grand Cross of the Royal Victorian Order, a Major-General in the Indian Army and an A.D.C. to His Imperial Majesty the King Emperor. He had the unique honour of serving on His Imperial Majesty's Staff in the Coronation Durbar of 1911 at Delhi.

His Highness has three sons—Colonel Nawab Sayed Raza Ali Khan Bahadur, Heir-Apparent, Sahebzada Sayed Jafar Ali Khan Bahadur and Sahebzada Sayed Abdul Kareem Khan Bahadur. The name of His Highness's grandson—son of the Heir-Apparent—is Sahebzada Sayed Murtaza Ali Khan Bahadur.

The permanent salute of the State is 15 guns and the annual income over fifty lakhs of rupees.

Tehri State (or Tehri-Garhwal).—This State lies entirely in the Himalayas and contains a tangled series of ridges and spurs radiating from a lofty series of peaks on the border of Tibet. The sources of the Ganges and the Jumna are in it. The early history of the State is that of Garhwal District, the two tracts having formerly been ruled by the

same dynasty. Pradyumna Shah, the last Raja of the whole territory, was killed in battle, fighting against the Gurkhas; but at the close of the Nepalese War in 1815, his son received from the British the present State of Tehri. During the Mutiny the latter rendered valuable assistance to Government. He died in 1859 without issue, and was succeeded by his near relative Bhawani Shah; and he subsequently received a *sanad* giving him the right of adoption. The present Raja is Captain H.H. Narendra Shah, C.S.I. The principal products are rice and wheat grown on terraces on the hill sides. The State forests are very valuable and there is considerable export of timber. The Raja has full powers within the State. The strength of the State forces is 130. The capital is Tehri, the summer capital being Pratapnagar, 8,000 feet above the sea-level.

Agent to the Governor-General: The Governor of the U. P. of Agra and Oudh.

Benares.—The kingdom of Benares under its Hindu Rulers existed from time immemorial and finds mention in Hindu and Buddhist literature. In the 12th century it was conquered by Shahab-Ud-din Ghori and formed a separate province of the Mohammadan Empire. In the 18th century when the powers of Moghal Emperors declined after the death of Aurangzib, Raja Mansa Ram, an enterprising zamindar of Gangapur (Benares District), founded the State of Benares and obtained a *sanad* from the Emperor Mohammad Shah of Delhi in the name of his son Raja Balwant Singh. Raja Mansa Ram died in 1740 and his son Balwant Singh became the virtual ruler. During the next 30 years attempts were unsuccessfully made by Safdar Jang and after him by Shuja-ud-daula of Oudh to destroy the independence of the Raja and the Fort of Ramnagar was built on the bank of the Ganges opposite the Benares city. Raja Balwant Singh died in 1770 and was succeeded by his son Chet Singh. He was expelled by Warren Hastings. Balwant Singh's daughter's son Mahip Narain Singh was placed on the *guddi*. The latter proved an imbecile and there was maladministration which led to an Agreement in 1794 by which the lands, held by the Raja in his own right which was granted to him by the British Government, were separated from the rest of the province. The direct control of the latter was assumed by the Government and an annual income of one lakh of rupees was assured to the Raja while the former constituted the Domains. Within the Domains the Raja had revenue powers similar to those of a Collector in a British District. There was thus constituted what for over a century was known as the Family Domains of the Maharaja of Benares. On the 1st of April 1911 the major portion of these Domains became a State consisting of the parganas of Bhadohi and Chakia (or Kera Mangraur). The town of Ramnagar and its neighbouring villages were ceded by the British Government to the Maharaja in 1918 and became part of the State. The Maharaja's powers are those of a ruling Chief, subject to certain conditions, of which the most important are the maintenance of all rights acquired under laws in force prior to the transfer, the reservation to Government of the control of the postal and telegraph systems, of plenary criminal jurisdiction within the State over servants of the British Government and European British subjects, and of a right of control in certain matters connected with excise. The present ruler is Lieut.-Colonel H. H. Maharaja Sir Prabhu Narain Sigh Bahadur, G.S.C.I., G.C.I.E., LL.D., who was born in 1855 and succeeded to the State in 1889. He is entitled to a salute of 15 guns and is a Hon. Lieut.-Colonel in the Indian Army. His Heir Apparent is Maharaj Kumar Aditya Narain Singh Bahadur.

PUNJAB STATES.

The 13 Salute States of the Punjab were transferred to the Political charge of the Government of India with effect from the 1st November 1921. Area 31,264 square miles. Population (1921) 4,008,040. Revenue Rs. 3,43,60,000.

These States may be grouped under three main clasess. The Hill States which lie in the Punjab Himalayas are held by families of ancient Rajput descent. To the south-west lies the large Mohamedan State of Bahawalpur. The remaining Sikh States of Patiala, Jind, Nabha, Kapurthala and Faridkot and the Mohamedan States of Malerkotla and Loharu lie east of Lahore in the eastern plains of the Punjab.

The list below gives details of the area, population and revenue of the 13 States:—

Name.	Area in square miles.	Population (Census of 1921)	Revenue approximate in lakhs of Rupees.
Bahawalpur	15,000	781,191	48,39,000
Bilaspur (Kahlur)	448	98,000	3,00,000
Chamba	3,216	141,867	4,11,000
Faridkot	642	150,661	20,42,000
Jind	1,259	308,183	28,00,000
Kapurthala	630	284,275	37,50,000
Loharu	222	20,614	1,31,000
Malerkotla	168	80,332	14,04,000
Mandi	1,200	185,048	12,92,000
Nabha	928	263,334	23,01,000
Patiala	5,932	1,499,739	1,28,50,000
Sirmur (Nahan)	1,198	140,468	6,00,000
Suket	420	54,328	21,34,000
Total ..	31,264	4,008,040	3,43,60,000

Bahawalpur.—A Native State in direct political relationship with the Government of India through the Agent to the Governor General, Punjab States Agency. Bahawalpur is situated between the Punjab and Rajputana, Latitude 26°41′ to 30°22′ 15″, Longitude 70°47′ to 74°1′ and bounded on the North East by the District of Ferozepur; on the East and South by the Rajputana States of Bikaner and Jaisalmere on the South West by Sind, and on the North West by the Indus and Sutlej rivers. Area 15,000 square miles.

This State is about 300 miles in length and about 40 miles wide, is divided lengthwise into three great strips. Of these, the first is a part of the Great Indian Desert; the central track is chiefly desert, not capable of cultivation identical with the Bar or Pat uplands of the Western Punjab; and the third, a fertile alluvial tract in the river valley is called the Sind. The ruling family is descended from the Abasside Khalifas of Baghdad. The tribe originally came from Sind, and assumed independence during the dismemberment of the Durrani empire in the Treaty of Lahore in 1809. Ranjit Singh was confined to the right bank of the Sutlej.

The first treaty with Bahawalpur was negotiated in 1833, the year after the treaty with Ranjit Singh for regulating traffic on the Indus. It secured the independence of the Nawab within his own territory and opened up the traffic on the Indus and Sutlej. During the first Afghan War the Nawab rendered assistance to the British and was rewarded by a grant of territory and life pension. On his death the succession was disputed and for a time the administration of the State was in the hands of the British authorities. The present Nawab is Capt. H. H. Rukn-ud-Daula, Nasrat Jang, Hafiz-ul-Mulk Nawab Sir Sadiq Mohammad Khan Bahadur Abbasi V., K.C.V.O., who was born in 1904 and succeeded in 1907. During his minority the State was managed by a Council of Regency which ceased to exist in March 1924, when H.H. the Nawab was invested with full power. His Highness is now assisted in the administration of his State by a Chief Minister, Captain Sardar Sikander Hyat Khan, K.B., M.B.E., M.L.C., a Public Works and Revenue Minister, Mr. C. A. Barron C.S.I., C.I.E., C.V.O., F.R.G.S., and a Home Minister, Moulvi Ghulam Hussain Qureshi Hashmi.

The chief crops are wheat, rice and millet. The Lahore-Karachi branch of the North Western State Railway passes through the State. The State supports an Imperial Service combined Infantry, in addition to other troops. The capital is Bahawalpur, a walled town built in 1748.

Income from all sources about 50 lakhs. Languages spoken Multani or Western Punjabi (Jatki), Sindhi and Marwari.

Agent to the Governor-General, Punjab States:—Mr. J. A. O. Fitzpatrick, B.A. LL.B. C.I.E., C.B.E., I.C.S.

Chamba.—This State is enclosed on the west and north by Kashmir, on the east and south by the British districts of Kangra and Gurdaspur, and it is shut in on almost every side by lofty hill ranges. The whole country is mountainous and is a favourite resort of sportsmen. It possesses a remarkable series of copper plate inscriptions from which its chronicle have been compiled.

Founded probably in the sixth century by Marut, a Surajbansi Rajput, who built Brahmapura, the modern Barmaur, Chamba was extended by Meru Varma (680) and the town of Chamba built by Sahil Varma about 920. The State maintained its independence, until the Moghal conquest of India.

Under the Moghals it became tributary to the empire, but its internal administration was not interfered with, and it escaped almost unscathed from Sikh aggression. The State first came under British influence in 1846. The part, west of the Ravi, was at first handed over to Kashmir, but subsequently the boundaries of the State were fixed as they now stand, and it was declared independent of Kashmir. The present chief is H. H. Raja Ram Singh, who was born in 1891, and succeeded in 1919. The principal crops are rice, maize and millets. There are some valuable forests which were partly leased to Government in 1864 for a term of 99 years, but the management of them has now been retroceded to the Chamba Durbar. The mountain ranges are rich in minerals which are little worked. The principal road to Chamba town is from Pathankot, the terminus of the Amritsar Pathankot branch of the North-Western Railway. Chamba town, on the right bank of the Ravi, contains a number of interesting temples, of which that of Lakshmi Narayan, dating possibly from the tenth century, is the most famous.

Faridkot.—The ruling family of this sandy level tract of land belongs to the Sidhu-Barar clan of the Jats, and is descended from the same stock as the Phulkian houses. Their occupation of Faridkot and Kot Kapura dates from the time of Akbar, though quarrels with the surrounding Sikh States and internal dissensions have greatly reduced the patrimony.

The present Ruling Prince, Farzand-i-Saadat Nishan Hazarat-i-Kaisar-i-Hind Brar Bans Raja Har Indar Singh Bahadur was born in 1915 and succeeded his father in 1919. Under the orders of the Government of India the administration of the State has been entrusted to a Council of Administration consisting of a President, Sardar Bahadur Sardar Indar Singh, B. A., and four members. The State has an area of 643 square miles with a population of 150,661 and has an annual income of 18 lakhs. The Ruler is entitled to a salute of 11 guns and a visit and return visit from the Viceroy. The State Forces consist of State Sappers and Household Troops (Cavalry and Infantry).

Jind.—Jind is one of the three Phulkian States (the other two being Patiala and Nabha). Its area is 1,268 square miles, with a population of 308,183 souls and an income of 25 lakhs.

The history of Jind as a separate State dates from 1763, when Raja Gajpat Singh, the maternal grandfather of Maharaja Ranjit Singh, and great grandson of the famous Phul, established his principality. He was succeeded by Raja Bhag Singh, who greatly assisted Lord Lake in 1805. His grandson Raja Sangat Singh was succeeded by the nearest male collateral Raja Sarup Singh in 1837. In the crisis of 1857 Raja Sarup Singh rendered valuable services to the British and was rewarded with a grant of nearly 600 square miles of land, known as Dadri territory. He was succeeded by his son. Maharaja Raghbir

Singh, who gave help to the British Government on the occasion of Kuka outbreak (1872) and the 2nd Afghan War (1878). The present ruler Maharaja Ranbir Singh was born in 1879, succeeded in 1887, and invested with full powers in 1899. The State rendered exemplary services in the Great European War. It supplied 8,673 men to the Indian Army and Imperial Service Troops and doubled the strength of its Imperial Service Infantry. The total contribution amounted to nearly 35 lakhs, in gifts of cash, materials, animals and loan.

His Highness enjoys a salute of 15 guns. The capital is Sangrur, which is connected by a State Railway with the North-Western Railway. The principal executive Officer of the State is called Chief Minister.

Ruler.—Colonel His Highness Farzand-i-Dilband Rasikh-ul-Itikad, Daulat-i-Inglishia Raja-i-Rajgan Maharaja Sir Ranbir Singh Rajendra Bahadur, G.C.I.E., K.C.S.I., etc.

Kapurthala.—This State consists of three detached pieces of territory in the great plain of the Jullundur Doab. The ancestors of the ruler of Kapurthala at one time held possessions both in the Cis and Trans-Sutlej and also in the Bari Doab. In the latter lies the village of Ahlu whence the family springs, and from which it takes the name of Ahluwalia. When the Jullundur Doab came under the dominion of the British Government in 1846, the estates north of the Sutlej were maintained in the independent possession of the Kapurthala Ruler, conditional on his paying a commutation in cash for military service engagements by which he had previously been bound to Maharaja Ranjit Singh, of Lahore. This Annual Tribute of Rs. 1,31,000 a year was remittedby the Government of India in perpetuity in (1924) in recognition of the splendid war record and uniformly efficient administration of the State. The Bari Doab estates are held by the head of the House as a jaghir in perpetuity, the civil and police jurisdiction remaining in the hands of the British authorities. For good services during the Mutiny, the present Maharaja's grandfather was rewarded with a grant of other estates in Oudh, which yield a large annual income equal to those of Kapurthala State. The present Ruler's titles are Col. H. H. Farzand-I-Dilband Rasikhul-Itikad Daulatt I-Inglishia Raja-I-Rajagan Maharaja Jagatjit Singh Bahadur Maharaja of Kapurthala, G.C.S.I., (1911), G.C.I.E., (1918), G.B.E., (1927), who was born on 24th November 1872 and succeeded his father His Highness the Late Raja-i-Rajgan Kharak Singh of Kapurthala in 1877. He was granted the title of Maharaja as an hereditary distinction in 1911. His salute was raised to 15 guns and he was made Honorary Colonel of the 45th Rattrays Sikhs. The Maharaja received the Grand Cross of the Legion d'Honneur from the French Government in 1924, and possesses also the Grand Cross of the Order of Carlos 3rd, of Spain, Grand Cross of the Order of the Star of Roumania, Grand Cross of the Order Menelek of Abyssinia, Grand Cordon of the Order of the Nile of Egypt, Grand Cordon of the Order of Morocco, Grand Cordon of the Order of Tunis, Grand Cross of the Order of Chili, Grand Cross of the Order of the Sun of Peru, Grand Cross of the Order of Cuba; twice represented Indian Princes and India on the League of Nations in 1926 and 1927, celebrated the Golden Jubilee of his reign in December 1927 with great eclat, when Their Excellencies the Viceroy and Lady Irwin, the Commander-in-Chief in India and Lady Birdwood, Governor of the Punjab and Lady Hailey, Their Highnesses the Maharajas of Jammu and Kashmir, Bikaner Patiala, Jamnagar, Alwar, Bharatpur, Rajpipla, Mandi, the Nawabs of Palanpur, Malerkotla, Loharu and the Raja of Kalsia were present, besides a very large and distinguished gathering of European and Indian guests.

The rulers of Kapurthala are Rajput Sikhs and claim descent from Rana Kapur, a distinguished member of the Rajput House of Jaisalmer. Only a small proportion of the population however are Sikhs, the majority being Mahomedans. The chief crops are wheat, gram, maize, cotton and sugarcane. The town of Sultanpur in this State is famous for hand-printed cloths. Phagwara is another important town in the State and is very prosperous on account of its grain markets and factories for manufacture of agricultural implements, and metallic utensils of household use. The situation of this town on the main railway line and the consequent facilities of export and import make its importance still greater and this is the chief commercial town in the State. The main line of the North-Western Railway passes through part of the State and the Grand Trunk Road runs parallel to it. A branch railway from Jullundur City to Ferozepur passes through the Capital. The Imperial Service and local Troops of the State have been re-organized and are now designated as Kapurthala State Forces. The State Troops, the strength of which was raised during the Great War, to nearly 2,000, served the Empire in that crisis in East Africa, Mesopotamia and on the Afghan Frontier. Primary education is free throughout the State, and it spends a large proportion of its revenues on its education department. The State also possesses a Legislative Assembly which was created by the present Maharaja on the occasion of the Silver Jubilee of his reign in 1916. The capital is Kapurthala which has been embellished by the present Maharaja with a Palace of remarkable beauty and grandeur and with various buildings of public utility. The town boasts modern amenities such as electric light, water-works, etc.

Political Officer: The Hon'ble Agent to the Governor- General, Punjab States, Lahore.

Malerkotla.—This State consists of a level sandy plain unbroken by a hill or stream, bounded by the district of Ludhiana on the north, by Patiala territory on the east and south and by the Ludhiana District, Patiala and Nabha territories on the west. The Rulers (Nawabs) of Malerkotla are of "Kurd" descent who came originally from the Province of "Sherwan" and settled in the town of "Sherwan" north of Persia, and after settling for a time in Afghanistan near Ghazni came to India and settled at *Maler*, the old capital of the State in 1442. Originally they held positions of trust under the Lodhi and Moghal Emperors. As the Moghal Empire began to sink into decay they gradually became independent. They were in constant feuds with the newly created adjacent Sikh States. After the victory of Laswari, gained by the British over Sindhia

in 1803 and the subjugation and flight of Holkar in 1805, when the Nawab of Malerkotla joined the British Army, the British Government succeeded to the power of the Mahrattas in the districts between the Sutlej and the Jumna. The State entered into political relations with the British Government in 1809. The present Ruler is Lt.-Col. His Highness Nawab Sir Ahmad Ali Khan, Bahadur, K.C.S.I., K.C.I.E., who was born in 1881 and succeeded in 1908. He was created Hony. Major in the Indian Army in June 1916 and promoted to the rank of Lt.-Col. in December 1919.

The chief products are cotton, sugar, poppy, aniseed, mustard, ajwain, methi, tobacco, garlic, onions and all sorts of grains.

The State maintains Sappers, Infantry, Cavalry and Artillery. The capital is Malerkotla. The population of the town is 30,000. Annual revenue of the State is about 16 lakhs.

Mandi is an Indian State in the Punjab Political Agency lying in the upper reaches of Bias river which drains nearly all its area. Its area is 1,200 square miles and it lies between 31°-23′ North Lat.; and 76°-22′ East Long.; and is bounded on the east by Kulu; on the south by Suket and on the north and west by Kangra. It has an interesting history of considerable length which finally resulted in its entering into a treaty with the British in 1846 A.D.

The present Ruler, Lieutenant His Highness Raja Jogindar Sen Bahadur, assumed full powers in February 1925. His Highness was married to the only daughter of His Highness the Maharaja of Kapurthala in February 1923 and was blessed with the birth of an heir-apparent in December 1923.

The Chief Executive Officer of the State is Rai Bahadur Dewan Dina Nath, Bar-at-Law, who has been designated as His Highness' Chief Minister. Construction work of the Kangra Valley Railway is in full swing. It is expected that the line will be open to traffic in November 1928. The Railway line will prove of considerable importance in linking Mandi with the Punjab and will materially develop its trade. The work of the Mandi Hydro-Electric Project is also in progress. This project when finished will supply electric power to practically the whole of the Punjab and will materially help in developing local industries.

The principal crops are rice, maize, wheat and millet. About three-fifths of the State are occupied by forests and grazing lands. It is rich in minerals. The capital is Mandi, founded in 1527, which contains several temples and places of interest and is one of the chief marts for commerce with Ladhakh and Yarkand.

Nabha.—Nabha which became a separate State in 1763 is one of the 3 Phulkian States —Nabha, Patiala and Jin—and though second in point of population and revenue of the 3 sister States, it claims seniority being descended from the eldest branch. It consists of two distinct parts, the main portion comprising 12 separate pieces of territory scattered among the other Punjab States and Districts, forms the City of Nabha and the *Nizamats* of Phul and Amloh; the second portion forms the *Nizamat* of Bawal in the extreme south-east of the Punjab on the border of Rajputana; this Nizamat of Bawal was subsequently added to its territory as a reward from the British Government for the loyalty of the Rulers of Nabha. The State now covers an area of about 1,000 square miles and has a population of about 3 lakhs. The State supports one battalion of Imperial Service Infantry consisting of about 500 men. For the preservation of the peace there is a Police force consisting of about 500 men.

The State is traversed by the main and 3 branch lines of the N. W. Railway and the B. B. & C. I. crosses the *Nizamat* of Bawal. A portion of the State is irrigated by the Sirhind Canal. The crops of the State are gram, pulses, bajra, sugarcane, cotton, wheat and barley, to facilitate trade the Durbar has opened grain markets and Banks near the principal railway station within the State territory. The chief industries of the State consist of the manufacture of silver and gold ornaments, brass utensils, and cotton carpets, lace and *gota*, etc. There are some ginning factories and a cotton steam press in the State which are working successfully. In 1923 an inquiry was held into certain matters in dispute between the Patiala and the Nabha Durbars which showed that the Nabha Police had fabricated cases against persons connected with the Patiala State with the object of injuring them through the Patiala Durbar. The Maharaja of Nabha who was born in 1883 and succeeded his father in 1911 entered into an agreement with the Government of India whereby he voluntarily separated himself from the administration retaining his salute and titles and the control of the State was accordingly assumed by the Government of India.

Patiala.—This is the largest of the Phulkian States, and the premier State in the Punjab. Its territory is scattered and interspersed with small States and even single villages belonging to other States and British districts. It also comprises a portion of the Simla Hills and territory on the border of Jaipur and Alwar States. Area 5,932 square miles. Population 1,499,739. Gross income Rs. one crore and thirty-five lakhs. Its history as a separate State begins in 1762. The present Ruler, Major-General His Highness Farz and-i-Khas Daulati-Inglishia Mansur-ul-Zaman Amir-ul-Umra Maharaja Dhiraj Rajeshwar, Sri Maharaja-i-Rajgan Sir Bhupindra Sing Mohinder Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., A.D.C., was born in 1891 and succeeded in 1900, and assumed the reins of government in 1909 on attaining majority. His Highness the Maharaja Dhiraj enjoys at present personal salute of 19 guns and he and his successors the distinction of exemption from presenting Nazar to the Viceroy in Durbar in perpetuity. The principal crops are grain, barley, wheat, sugar-cane, rapeseed, cotton and tobacco. A great part of the State is irrigated by the Sirhind and Western Jumna Canal distributaries. It possesses valuable forests. The State is rich in antiquities, especially at Pinjaur, Sunam, Sirhind, Bhatinda, Narnaul, etc. It has a Railway line of its own, known as Rajpura-Bhatinda Railway of 108 miles in length, besides this the State has undertaken the construction of a broad gauge line about 40 miles

in length to connect Sirhind and Rupar. This new line will be opened for traffic early in 1928, the North-Western Railway, the E. I. Railway, the B. B. & C. I. Railway and the J. B. Railway traverse the State. His Highness maintains a contingent of two regiments of cavalry and four battalions of infantry—one battery of Horse Artillery.

The State maintains a first grade college which imparts free education to all students. Primary education is also free throughout the State. The Durbar has recently sanctioned a scheme of compulsory education.

Since the State has entered into alliance with the British Government in 1809, it has rendered help to the British Government on all critical occasions such as Gurkha War, Sikh War, Mutiny of 1857, Afghan War of 1878-79, Tirah and N. W. F. campaign of 1897.

On the outbreak of the European War His Highness placed the entire resources of his State at the disposal of His Majesty the King-Emperor and offered his personal services. The entire Imperial Service Contingent was on active service throughout the period of the War and served on various fronts in Egypt, Gallipoli, Mesopotamia and Palestine, winning numerous distinctions. Two mule and one camel corps were raised and placed at the service of the British Government for the period of the War, and in addition to furnishing nearly 28,000 recruits for the British Indian Army and maintaining the State Imperial Service Contingent at full strength, contributed substantially in money and material.

His Highness was selected by His Excellency the Viceroy to represent the Ruling Princes of India at the Imperial War Conference and Imperial War Cabinet in June 1918 and during his stay in Europe His Highness paid visits to all the different and principal fronts in Belgium. France, Italy and Egypt (Palestine) and received the following decorations from the allied Sovereigns and Governments:—(*a*) Grand Cordon of the Order de Leopold, (*b*) Grand Cross of the Legion of Honour, France, and (*c*) Grand Cross of the Order of the Crown of Italy and (*d*) Grand Cordon of the Order of the Nile, (*e*) Grand Cross of the Order of the Crown of Roumania (*f*) Grand Cross of the Order of St. Saviour of Greece (1926).

Again in 1919 on the outbreak of hostilities with Afghanistan His Highness served personally on the frontier on the Staff of the General Officer Commanding, and the Imperial Service Contingent was on active service towards Kohat and Quetta fronts. For his services on the N.-W. Frontier His Highness was mentioned in despatches. He was elected Chancellor of the Chamber of Princes (Narendra Mandal) in 1925 and 192; and represented Indian Princes at the League of Nations at Geneva in 1925.

Sirmur (Nahan).—This is a hilly State in the Himalayas under the Political control of the Agent to the Governor-General, Punjab States, Lahore. Its history is said to date from the 11th century. In the eighteenth century the State was able to repulse the Gurkha invasion, but the Gurkhas were invited to aid in the suppression of an internal revolt in the State and they in turn had to be evicted by the British. In 1857 the Raja rendered valuable services to the British, and during the second Afghan War he sent a contingent to the North-West Frontier. The present Chief is Lieut.-Colonel H. H. Maharaja Sir Amar Prakash Bahadur, K.C.S.I., K.C.I.E., who was born in 1888 and succeeded in 1911. The main agricultural feature of the State is the recent development of the Kiarda Dun, a fertile level plain which produces wheat, gram, rice, maize and other crops. The State forests are valuable and there is an iron foundry at Nahan which was started in 1867 but, being unable to compete with the imported iron, is now used for the manufacture of sugarcane crushing mills. The State supports a Corps of Sappers and Miners which served in the Great War. It was captured with General Townshend's force at Kut-al-Amara but the Corps was reconstituted and sent to service.

UNDER THE GOVERNMENT OF BURMA.

The States under this Government comprise the Shan States which are included in British India though they do not form part of Burma. proper and are not comprised in the regularly administered area of the Province and the Karenni States which are not part of British India and are not subject to any of the laws in force in the Shan States or other parts of Burma

The Shan States comprise the two isolated States of Hsawnghsup and Singaling Hkamti in the Upper Chindwin District under the supervision of the Commissioner, Sagaing Division, the eight petty village communities under separate hereditary Chiefs known as Hkamti Long in the Myitkyina District and the two main division of the Shan States known as the Northern and Southern Shan States numbering six and thirty-two States respectively which are under the Commissioner, Federated Shan States.

Hsawnghsup with an area of 529 square miles and a population of 7,043 lies between the 24 and 25 parallels of latitude and on the 95 parallel of longitude between the Chindwin river and the State of Manipur.

Singaling Hkamti has an area of 983 square miles and a population of 2,287 and lies on the 26th and 90th parallels of latitude and longitude respectively.

The Hkamti Long States have an area of 200 square miles with a population of 6,520 and lie between the 27th and 28th parallels of latitude on the Upper Waters of the N'Mai branch of the Irrawaddy.

The Northern Shan States (area 20,156 square miles and population 592,813) and the Southern Shan States (area 36,157 square miles and population 847,618), form with the unadministered Wa States (area about 2,000 square

miles) and the Karenni States, a huge triangle lying roughly between the 19th and 24th parallels of latitude and the 96th and 102nd parallels of longitude with its base on the plains of Burma and its apex on the Mehkong river.

The population consists chiefly of Shans who belong to the Shan group of the Tai Chinese family; the remainder belong chiefly to the Wa-palaung and Mon Khmer groups of races of the Austro-Asiatic brand of the Austric family, or to the Karen family which Sir George Grievson now proposes to separate from the Tai Chinese family. There are also a number of Kachins and others of the Tibeto-Burman family. The Shans themselves shade off imperceptibly into a markedly Chinese race on the frontier. Buddhism and Animism are the principal religions.

The climate over so large an area varies greatly. In the narrow lowlying valleys the heat in summer is excessive. Elsewhere the summer shade temperature is usually 80 to 95 Fahr. In winter frost is severe on the paddy plains and open downs but the temperature on the hills is more equable. The rainfall varies from 50 to 100 inches in different localities.

The agricultural products of the States are rice, pulses, maize, buckwheat, cotton, sessamum, groundnuts, oranges and pineapples.

Land is held chiefly on communal tenure but unoccupied land is easily obtainable on lease from the Chiefs in accordance with special rules for non-natives of the States. Great spaces of the States are suitable for cattle, pony and mule breeding and in the Northern States Chinese settlers appear to have found the latter a very paying proposition.

The mineral resources of the States are still unexplored. The Burma Corporation have a concession for silver and lead in the Northern States which they claim to be the richest in the world. The Mawson area in the Southern States is also rich in lead. Lignite and iron ore of a low grade are found in many places.

Lashio, the headquarters of the Northern Shan States District, is the terminus of the Myohaung-Lashio Branch of the Burma Railways (178 miles) and is also connected with Mandalay by a cart road.

The Burma Corporation's narrow gauge private railway track 46 miles long connects their Bawdwin mine with the Burma Railways system at Namyao.

The Southern Shan States are served by the Burma Railways branch line Thazi to Heho (87 miles) which has recently been extended to Tayaw in the Yawnghwe plain.

Taunggyi, the headquarters of the Southern Shan States, is connected with Thazi by a well-graded motor road. The States vary much in size and importance. The largest State is Kengtung with an area of 12,400 square miles and population 208,761. The smallest State is Namtok with an area of 14 square miles and population 830.

Hsipaw with an area of 4,400 square miles and population 131,410 is the richest State with a gross revenue of Rs. 8,30,605.

The Sawbwas of Kengtung, Hsipaw and Yawnghwe and Mongnai have salutes of nine guns while the Mong Mit Sawbwa has a personal salute of the same number.

Administration.

Under the Burma Laws Act, 1898, the Civil, Criminal and Revenue administration of every Shan State is vested in the Chief of the State subject to the restrictions specified in the sanad of appointment granted to him and under the same Act the law to be administered in each State is the customary law of the State so far as it is in accordance with justice, equity and good conscience and not opposed to the law in force in the rest of British India. The customary law may be modified by the Governor who has also power to appoint officers to take part in the administration of any State and to regulate the powers and proceedings of such officers. The Chiefs are bound by their sanads to follow the advice of the Superintendents appointed but subject to certain modifications which have been made in the customary law relating to criminal and civil justice have more or less maintained the semi-independent status which was found existing at the annexation of Upper Burma.

In 1920, Sir Reginald Craddock, Lieutenant-Governor of Burma, proposed a scheme for the sanction of the Secretary of State under which the Chiefs of the Northern and Southern Shan States have agreed to federalise the departments of Government in which they had been previously largely dependent on contributions from the Provincial Funds. Under this scheme no interference is contemplated in the internal management of the States and the Chiefs continue to collect their taxes and be responsible for law and order, maintain Courts for the disposal of criminal and civil cases, appoint their own officials and control their own subjects under the advice of the Superintendents. But the Federation is responsible for the centralised Departments of Public Works, Medical, Forests, Education, Agriculture and to a small extent Police. In place of the individual tribute formerly paid by them the Chiefs contribute to the Federation a proportion of their revenue which amounts roughly to the expenditure hitherto incurred by them on the heads of administration now centralised while the Provincial Government surrenders to the Federation all provincial revenue previously derived from the States and makes an annual contribution to enable it to maintain its services at the same degree of efficiency formerly enjoyed. The Federation on the other hand pays a fixed proportion of its revenue to the Provincial Treasury as tribute in place of the individual contributions of the Chiefs. Under this scheme the Federation is a sub-entity of the Burma Government, is self-contained and responsible for its own progress. The Chiefs express their views on Federal and general matters through a Council of Chiefs consisting of all Chiefs of the rank of Sawbwa and four elected representatives of the lesser Chiefs. The Superintendents, Northern Shan States and the Commissioner of the Federated Shan States to whom the supervision of the Federation has been entrusted are *ex-officio*

members of the Council. The scheme was sanctioned and brought into force with effect from October 1922. The first meeting of the Council of Chiefs was formally opened by His Excellency the Governor Sir Spencer Harcourt Butler, G.C.I.E., K.C.S.I., I.C.S., in March 1923.

Karenni.

This district which formerly consisted of five States now consists of three as two have been amalgamated with others. It has a total area of 3,550 square miles and a population of 48,780. It lies on the south of the Southern Shan States between Siam and the British district of Toungoo. The largest State is Kantarawadi with an area of 3,000 square miles and a population of 36,621 and a revenue of nearly 1½ lakhs of rupees. More than half of the inhabitants are Red Karens. An Assistant Political Officer is posted at Loikaw subject to the supervision of the Superintendent, Southern Shan States, who exercises in practice much the same control over the Chiefs as is exercised in the Shan States though nominally they are more independent than their Shan neighbours. Mineral and forest rights however in Karenni belong to the Chiefs and not to the Government. In the past substantial contributions from Provincial revenues have been made to the Karenni Chiefs for education and medical service. The Chiefs are at present unwilling to surrender their special rights and join the Shan States Federation though very considerable advantages might accrue from their doing so.

The principal wealth of the country used to be in its teak timber and a large alien population was at one time supported by the timber trade. This has largely declined in the last few years and unless the Chiefs are prepared to deny themselves and close their forests they will soon disappear.

UNDER THE GOVERNMENT OF ASSAM.

Manipur.—The only State of importance under the Government of Assam, is Manipur which has an area of 8,456 square miles and a population of 3,84,016 (1921 Census), of which about 60 per cent. are Hindus and 34 per cent. animistic hill tribes. Manipur consists of a great tract of mountainous country, and a valley about 50 miles long and 20 miles wide, which is shut in on every side. The State adopted Hinduism in the early eighteenth century, in the reign of Pamheiba or Gharib Nawaz, who subsequently made several invasions into Burma. On the Burmese retaliating, Manipur negotiated a treaty of alliance with the British in 1762. The Burmese again invaded Manipur during the first Burmese war, and on the conclusion of peace in 1826 Manipur was declared independent. The chief event in its subsequent history was the intervention of the British in 1891 to establish the claim of Kula Chandra Singh as Maharaja, followed by the treacherous murder of the Chief Commissioner, Mr. Quinton, and the officers with him, and the withdrawal of the escort which accompanied him. From 1891 to 1907 the State was administered by the Political Agent, during the minority of H. H. Chura Chand Singh. The Raja was invested with ruling powers in 1907 and formally installed on the gadi in 1908. For his services during the War the hereditary title of Maharaja was conferred on him. He is entitled to a salute of 11 guns.

The administration of the State is now conducted by H. H. the Maharaja, assisted by a Durbar, which consists of a President, who is a member of the Indian Civil Service, his services being lent to the State by the Assam Government three ordinary and three additional members, who are all Manipuris. The staple crop of the country is rice. Forests of various kinds cover the great part of the mountain ranges.

Khasi and Jaintia Hills.—These petty chiefships, 25 in number, with a total area of about 3,900 square miles and a population of 136,000, are included under the Government of Assam. Most of the States have treaties or engagement with the British Government. The largest of them is Khyrim, the smallest is Nonglwai, which has a population of only 246. Most of them are ruled by a Chief or Siem, The Siemship usually remains in one family. The succession was originally controlled by a small electoral body constituted from the heads of certain clans but in recent years there has been a tendency to broaden the elective basis. The constitution of a Khasi State has always been of a very democratic character, a Siem exercising but little control over his people.

UNDER THE GOVERNMENT OF THE CENTRAL PROVINCES.

The Central Provinces include fifteen feudatory States subordinate to the Government with an area of 31,080 square miles and a population of 2,067,371. One of the States, Makrai, lies within Hoshangabad District; the remainder are situated in the Chhattisgarh Division, to the different districts of which they were formerly attached. Their relations with Government are controlled by a Political Agent. The States vary greatly in size and importance. Sakti, the smallest, having an area of 138 square miles and Bastar, the largest, an area of 13,062 square miles. They are administered by hereditary chiefs, who hold on conditions of loyalty and good government set forth in patents and acknowledgments of fealty, but are nominally free from direct interference save in the case of sentences of death, which require His Excellency the Governor's confirmation. But, as a fact, the Government has exercised a very large amount of control, owing mainly to the frequency with which the States have been taken under direct management, because of either the minority or the misconduct of the chief.

The States pay a tribute to Government which amounts in the aggregate to about 2½ lakhs.

Statistics relating to the chief States are contained in the following table:—

State.	Area.	Population. 1921.	Revenue (approximate) in lakhs.
	Sq. Miles.		Rs.
Bastar ..	13,062	464,137	8
Jashpur ..	1,963	154,156	3
Kanker ..	1,429	124,928	4
Khairagarh ..	931	124,008	6
Nandgaon ..	871	147,919	7
Raigarh ..	1,486	241,634	6
Surguja ..	6,055	378,226	6
Eight other States ..	5,283	432,363	14
Total ..	31,080	2,067,371	54

Bastar.—This State, in the south-east corner of the province, is the most important in the group. In area (13,062 square miles) it is the twelfth largest State in India, but the population in 1921 was only 464,407 and is very scattered and backward. A point of interest is that Bastar is the only State in India of which the Chief is a Hindu lady. She is the last descendant of an ancient family of Lunar Rajputs, which ruled over Warangal until the Mahommedan conquest of the Deccan in the 14th century A. D. when the brother of the last Raja of Warangal fled into Bastar and established a kingdom there. From then till the days of the Marathas the State was virtually independent, its inaccessibility securing it from all but occasional raids of Mahommedan freebooters. The Bhonslas of Nagpur imposed a small tribute on Bastar in the 18th century, and at various times for delay in payment deprived it of the Sihawa tract in the Raipur district, and allowed the Raja of Jeypore in the adjacent Vizagapatam Agency of Madras to retain possession of the Kotapad tract, originally pledged to Jeypore by a Bastar Raja for assistance during family dissensions. The dispute between Bastar and Jeypore over this land led to constant border disturbances, and was not finally settled till 1863, when the Government of India, while recognising Bastar's claim, finally made the tract over to Jeypore on the ground of long possession, on condition of payment by Jeypore of Rs. 3,000 tribute, two-thirds of which was remitted from the tribute payable by Bastar. The present tribute paid by Bastar is Rs. 20,000 a year.

On the formation of the Central Provinces, Bastar was recognised as a Feudatory State. Since then the State has made steady, if slow, progress, hampered by the innate conservatism of its aboriginal population, which has from time to time rebelled. The last rebellion, in 1910, was due to oppression by minor State officials and dislike of the rigorous forest policy then under introduction. After the rebellion the Raja had his powers reduced, and a series of Diwans was appointed by the Central Provinces Administration. The State has since his death continued to be under Government management, owing to the minority of Rani Prafulla Kumari Devi, the present Chief. The present Administrator of the State is Mr. W. V. Grigson, I.C.S., of the Central Provinces Commission. He is assisted by two sub-divisional officers, a European Medical Officer and State Engineer, a Superintendent of Police and a Forest Officer.

Nearly 11,000 square miles are covered by forest, of which about 3,000 square miles are reserves. Cultivation is therefore sparse. Rice and mustard are the chief crops. There is a large export of grain, timber and minor forest produce, particularly myrabolams. Most of the sal forest is leased to Messrs. Gillanders Arbuthnot for sleeper manufacture. The forest revenue in 1927 was just under Rs. 3 lakhs. The extension of the Salur branch of the B. N. R. to Jagdalpur and of the Raipur Forest Tramway to Kondagaon are under consideration. There are more than 600 miles of gravel motorable road in the State. The advent of the railway should lead to a great increase in the revenue of the State, and may lead to the exploitation of its great deposits of iron, manganese and tin. The revenue in 1927 was Rs. 10·33 lakhs, expenditure Rs. 8·93 lakhs and free closing balance Rs. 3·72 lakhs.

The capital, Jagdalpur, on the Indrawati River, has a population of 7,999, and is 184 miles by motorable road from Raipur in the Central Provinces, and 210 from Vizagapatam in Madras Presidency. The famous Chitrakot falls (97 ft. high) of the Indrawati are 23 miles from Jagdalpur.

Surguja.—Until 1905 this was included in Chota Nagpur State of Bengal. The most important feature is the Manipat, a magnificent tableland forming the southern barrier of the State. The early history of Surguja is obscure; but according to a local tradition in Palamau, the present ruling family is said to be descended from a Raksel Raja of Palamau. In 1758 a Maratha army overran the State, and compelled its Chief to acknowledge himself a tributary of the Bhonsla Raja. At the end of the eighteenth century, in consequence of the Chief having aided a rebellion in Palamau against the British, an expedition entered Surguja; and, though order was temporarily restored, disputes again broke out between the Chief and his relations, necessitating British interference. Until 1818 the State continued to be the scene of constant lawlessness; but in that year it was ceded to the British Government under the provisional agreement concluded with Mudhoji Bhonsla of Berar, and order was soon established. The principal crops are rice and other cereals. The present Chief of the State is Maharaja Ramanuj Saran Singh Deo, C.B.E., who succeeded to the *gadi* in 1918 and enjoys full powers of a Ruling Chief.

JAMMU AND KASHMIR STATE.

The territory known generally as the Jammu and Kashmir State lies between 32° and 37° N and 73° and 80° E. It is an almost entirely mountainous region with a strip of level land along the Punjab Border, and its mountains, valleys and lakes comprise some of the grandest scenery in the world. The State may be divided physically into three areas: the upper, comprising the area drained by the River Indus and its tributaries; the middle, drained by the Jhelum and Kishenganga Rivers; and the lower area, consisting of the level strip along the southern border, and its adjacent ranges of hills. The dividing lines between the three areas are the snow-bound inner and outer Himalayan ranges known as the Zojila and the Panchal. The area of the State is 84,258 square miles. Beginning in the south where the great plain of the Punjab ends, it extends northwards to the high Karakoram mountains "Where three Empires Meet."

Briefly described, the State comprises the valleys of the three great rivers of Northern India, *viz.*, the upper reaches of the Chenab and the Jhelum, and the middle reaches of the Indus. The total population is 3,220,518 souls.

HISTORY.—Various historians and poets have left more or less trustworthy records of the history of the Valley of Kashmir and the adjacent regions. In 1586 it was annexed to the Moghul Empire by Akbar. Srinagar, the Capital, originally known as Pravarapura, had by then been long established though many of the fine buildings said to have been erected by early Hindu rulers had been destroyed by the Muhammadans who first penetrated into the Valley in the fourteenth century. In the reign of Sikandar, who was a contemporary of Tamerlane, a large number of Hindus was converted to Islam Jehangir did much to beautify the Vallley but after Aurangzeb there was a period of disorder and decay and by the middle of the eighteenth century the Suba or Governor of Kashmir had become practically independent of Delhi. Thereafter the country experienced the oppression of Afghan rule until it was rescued in 1819 by an army sent by Maharaja Ranjit Singh. The Sikh rule was less oppressive than that of the Afghans. The early history of the State as at present constituted is that of Maharaja Shri Gulab Singhji, a scion of the old Ruling Family of Jammu, who rose to eminence in the service of Maharaja Ranjit Sing of Lahore and was, in recognition of his distinguished services, made Raja of Jammu in 1820. He held aloof from the war between the British and the Sikhs, only appearing as mediator after the battle of Sobraon (1846), when the British made over to him the valley of Kashmir and certain other areas in return for seventy-five lakhs of rupees. His son, His Highness Maharaja Ranbir Singhji, G.C.S.I., G.C.I.E., a model Hindu and one of the staunchest allies of the British Government, ruled from 1857 to 1885. He did much to consolidate his possessions and evolve order in the frontier districts. He was succeeded by this eldest son His Highness Maharaja Sir Pratap Singhji, G.C.S.I., G.C.I.E., G.B.E., who died on 23rd December 1925 and was succeeded by His Highness the present Maharaja. Shri Harisinghji Bahadur.

The most notable reform effected in the State during the reign of the late Maharaja was the Land Revenue Settlement originally carried out under Lawrence and revised from time to time.

ADMINISTRATION.—For some years after the accession to the *gadi* of the late Maharaja, the administration of the State was conducted by a Council over which the Maharaja presided. In 1905 this Council was abolished and the administration of the State was thenceforward carried on by His Highness the Maharaja with the help of a Chief Minister and a number of Ministers in charge of different portfolios. This system continued until the 24th January 1922 when an Executive Council was inaugurated. Very recently, certain modifications have been introduced in the Constitution as a result of which the contact of His Highness with the administration of the State has become more direct and intimate.

The British Resident has his headquarters at Srinagar and Sialkot and there is also a Political Agent at Gilgit. A British Officer is stationed at Leh to assist in the supervision of the Central Asian Trade with India which passes through Kashmir.

In the Dogras the State has splendid m[illegible]ia for the Army which consists of 7,798 troops. Besides this, thousands of Dogras serve in the Indian Army.

FINANCE.—The financial position of the State is strong. The total revenue is about Rs. 2,25,00,000; the chief sources being land forests, customs and excise and Sericulture. There is a big reserve and no debt.

PRODUCTION AND INDUSTRY.—The population is pre-eminently agricultural and pastoral. The principal food crops are rice, maize and wheat. Oilseed is also an important crop. Barley, cotton, saffron, tobacco, beans, walnuts, almonds and hops are also grown. Pears and apples, the principal fruits of the Valley, are exported in large quantities. The State forests are extensive and valuable. The principal species of timber trees are deodar, blue pine and fir. The most valuable forests occur in Kishtwar, Karnah and Kamraj Ilaqas. A survey of the mineral resources of the State is being conducted under an expert. The most noteworthy of the minerals are bauxite, coal, fuller's earth, kaolino, slate, zinc, copper and talc. Gold is found in Baltistan and Gilgit, sapphires in Paddar, aquamarines in Skardu and lead in Uri. The silk filature in Srinagar is the largest of its kind in the world. Manufacture of silk is a very ancient industry in Kashmir. Zain-ul-Abidin who ruled from 1421 to 1472 is said to have imported silk weavers from Khurasan and settled them here. Woollen cloth, shawls, papier machi and wood carving of the State are world-famous. The State participated in the British Empire Exhibition of 1924. The Kashmir Court was styled "The Gem Of The Smaller Courts" and attracted many visitors.

COMMUNICATIONS.—Great efforts have been made and are being made towards the improvement of roads for wheeled traffic in the State. The Jhelum Valley road (196 miles) which links the Kashmir Valley with the Punjab and the North-Western Frontier Province is considered to be one of the finest motorable mountain roads in the world.

The Banihal Cart Road, 205 miles long, which has recently been completed, joins Kashmir with the North Western Railway system at Jammu-Tawi and is also a fine motorable road.

Roads for pack animals lead from Srinagar, the summer capital of Kashmir, to the frontier districts of Gilgit and Ladakh. Internal village communications have also been much improved.

The Jammu-Suchetgarh Railway, a section of the Wazirabad-Sialkot branch line of the North Western Railway system, is the only Railway in the State. The mountainous nature of the country has made the extension of the line into the heart of the State so far impracticable.

PUBLIC WORKS.—In 1904 a flood spill channel above Srinagar was constructed to minimise the constant danger of floods in the River Jhelum and it was hoped that the danger would be still further reduced by the carrying out of a scheme for lowering a part of the bed of the River Jhelum by dredging, which has been taken in hand. It is interesting to know that dredging operations were once before carried out in the reign of Avantivarman (A.D. 855-883) by his engineer Suyya near Sopore, with the same object. Good progress has been made with irrigation but the most important scheme of recent years has been the installation of a large Electric Power Station on the Jhelum River at Mahora which was completed in 1907.

EDUCATION.—Of the total population of 3,259,527 excluding the frontier ilaqas where literacy is not recorded, there are 72,228 persons who are able to read and write, of whom 4,007 only are females. In other words, 26 out of every 1,000 persons aged five or more can read and write. Among males 46 in every 1,000 are literate. The number of educational institutions including two Arts Colleges and two technical institutes is 784 and is being steadily increased.

THE CHAMBER OF PRINCES.

The Report on Indian constitutional reforms by Mr. Montagu and Lord Chelmsford stated that it was desired to call into existence a permanent consultative body which would replace the conference of Princes which had periodically met at the invitation of the Viceroy. After pointing out the need for regular meetings of the Council, the Report said:—"We contemplate that the Viceroy should be **president**, and should as a rule preside, but that in his absence one of the Princes should be chairman. The rules of business would be framed by the Viceroy after consultation with the Princes, who might from time to time suggest modifications in the rules."

It was further suggested in the joint report that the Council of Princes should be invited annually to appoint a small **standing committee**, to which the Viceroy or the Political Department might refer decisions affecting the Native States, particularly questions dealing with custom or usage. The Joint Report also made recommendations for the appointment of commissions to inquire into disputes in which Native States might be concerned and into cases of misconduct, and for arranging for joint deliberation on matters of common interest between the Council of State and the Council of Princes.

At the end of January 1919 a Conference of the Ruling Princes was held at Delhi, to consider this scheme. The subject which gave rise to the longest discussion was the proposal in the Reform Scheme to divide the Native States into two categories, those possessing "full powers" of internal Government and those not having such powers. Some of the Princes held that membership of the Council of Princes should be limited to the rulers enjoying full powers, whilst others considered that some measure of representation ought to be given to the smaller States; and the Conference came to no agreement on the matter. The proposal to institute a Council of Princes received, however, general support, and it was suggested that the new House should be called the **Narendra Mandal** (House of Princes.)

The recommendations of the Conference were then placed before the Secretary of State, and in the next Conference held in November 1919. Lord Chelmsford propounded a general scheme for a Chamber of Princes approved by His Majesty's Government. The Conference after debating the question passed a resolution warmly accepting the scheme and expressing an earnest hope that the Chamber might be brought into existence during the ensuing year. On the occasion of the **formal inauguration** of the Chamber of Princes Lord Chelmsford, describing how he enlisted the advice and criticism of the Codification Committee of Princes which had been appointed by the Conference and how with their assistance the drafts of the Constitution of the Chamber with the first Regulations and Rules of Business, and the draft resolution concerning Courts of Arbitration and Commissions of Enquiry were moulded into practical shape, explained that difficulties had arisen in the selection of a suitable Indian designation for the Chamber which would for the present be known by the English title of the Chamber of Princes. He also said that another point on which the published constitution differed from the wording favoured by the Committee of Princes was the absolute prohibition of the discussion in the Chamber of the internal affairs of individual States and the actions of individual Rulers. The main function of the Chamber was to discuss matters affecting the States generally or of common concern to the States and to British India or the Empire at large. As regards the question of direct relations between the Government of India and the important States, a recommendation had been made to the Secretary of State for the transfer of the more important States in the Bombay Presidency, according to a scheme prepared by a special Committee, to be carried into effect at some future date, when the conditions appear to be favourable. A scheme would also shortly be placed before His Majesty's Government for the bringing of the important States of the Punjab into direct relations with the Government of India as soon as the necessary arrangements could be made. Gwalior State would soon be brought into direct touch with

the Central Government through a Resident who would be independent of the Central India Agency and some of the Rajputana States, which were formerly in relations with a Local Resident, were now in direct relations with the Agent to the Governor-General in Rajputana.

The Chamber was formally inaugurated by the Duke of Connaught on February 8th, 1921, ana has quickly developed a vigorous life. Its Presidential duties are entrusted to an elected Chancellor, now H. H. the Maharajah of Bikaner and its detailed business is attended to by an elected Standing Committee of six members. This meets twice or thrice a year at the head-quarters of the Government of India and one of its most important functions is to discuss with the various Departments of that Government matters in which the Administrations of both the States and British India are concerned. Important questions of this class which have recently received attention are the division of revenue from Customs and Posts and Telegraphs nad the control of the Police on railway lines running for considerable distances through State territory. The Committee reports to the Chamber, which meets annually. The number of Princes who attended the last meeting was between forty and fifty. Its proceedings have hitherto always been conducted in private.

Indian States' Tribute.

Many of the States pay tribute, varying in amount according to the circumstances of each case, to the British Government. This tribute is frequently due to exchanges of territory or settlement of claims between the Governments, but is chiefly in lieu of former obligations to supply or maintain troops. The actual annual receipts in the form of tribute and contributions from Indian States are summarised in the following table. The relations of the States to one another in respect of tributes are complicated, and it would serve no useful purpose to enter upon the question. It may, however, be mentioned that a large number of the States of Kathiawar and Gujarat pay tribute of some kind to Baroda, and that Gwalior claims tribute from some of the smaller States of Central India :—

States paying tribute directly to the Government of India.

	£
Tribute from Jaipur	26,667
„ „ Kotah	,648
„ „ Udaipur	,333
„ „ Jodhpur	,533
„ „ Bundi	,000
„ „ Other States	,170
Contribution of Jodhpur towards cost of Erinpura Irregular Force	667
„ of Kotah towards cost of Deohi Irregular Force	13,333
„ of Bhopal towards cost of Bhopal Levy	10,753
„ of Jaora towards cost of United Malwa Contingent	9,142
Contributions towards cost of Malwa Bhil Corps	2,280
Central Provinces and Berar.	
Tributefrom various States	15,696
Burma.	
Tributes from Shan States	28,524
„ „ other States	1,367
Assam.	
Tribute from Manipur	333
„ „ Rambrai	7
Bengal.	
Tribute from Cooch Behar	4,514
United Provinces.	
Tribute from Benares	14,600
„ „ Kapurthala (Bahraich)	8,733
Punjab.	
Tribute from Mandi	6,667
„ „ other States	3,086
Madras.	
Tribute from Travancore	53,333
Peshkash and subsidy from Mysore	233,333
„ „ „ „ Cochin	13,333
„ „ „ „ Travancore	888
Bombay.	
Tribute from Kathiawar	31,129
„ „ various petty States	2,825
Contribution from Baroda States	25,000
„ „ Jagirdars, Southern Mahratta Country	5,765
Tribute from Cutch	5,484

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Foreign Possessions in India.

Portugal and France both hold small territorial possessions in the Indian Peninsula.

The Portuguese possessions in India, all of which are situated within the limits of Bombay Presidency, consist of the Province of Goa on the Arabian Sea Coast; the territory of Daman with the small territory called Pragana-Nagar-Avely on the Gujarat Coast, at the entrance to the Gulf of Cambay; and the little island of Diu, with two places called Gogla and Simbor, on the southern extremity of the Kathiawar Peninsula. All these three territories constitute what is called the State of India.

GOA.

Goa forms a compact block of territory surrounded by British districts. Savantwadi State lies to the north of it, the Arabian Sea on the west and North Kanara on the south, and the eastern boundary is the range of the Western Ghats, which separates it from the British districts of Belgaum and North Kanara. The extreme length from north to south is 62 miles and the greatest breadth from east to west 40 miles. The territory has a total area of 1,301 square miles and consists of the *Velhas Conquistas*, or Old Conquests, comprising the island of Goa, acquired by the Portuguese in 1510, and the neighbouring municipalities of Salsette, Bardez, and Mormugao acquired in 1543; and of the *Novas Conquistas*, or New Conquests, comprising the municipalities of Pernem, Sanquelim, Ponda, Quepem, Canacona, Satari and Sanguem acquired in the latter half of the 18th century. The small island of Angediva situated opposite the port of Karwar, in the British district of North Kanara, forms administratively a portion of the Canacona municipality. This was acquired in 1505. The whole country is hilly, especially the eastern portion, the predominating physical feature being the Western Ghats, which besides bounding the country along the north-east and south-east, just off westward and spread across the country in a succession of spurs and ridges. There are several conspicuous isolated peaks, of which the highest, Sonsagar, is 3,827 feet high.

The country is intersected by numerous rivers running westward from the Ghats, and the principal eight, which are all navigable, are in size of some importance. Goa possesses a fine harbour, formed by the promontories of Bardez and Salsette. Half-way between these extremities lies the *cabo*, or cape, which forms the extremity of the island of Goa. This divides the whole bay into two anchorages, known as Aguada and Mormugao. Both are capable of accommodating the largest shipping from September to May, but Aguada is virtually closed during the south-west monsoon, owing to the high winds and sea and to the formation of sand bars across the estuary of the Mandovi river, which opens into Aguada. Mormugao is accessible at all times and is therefore the harbour of commercial importance. It is the terminus of the railway running to the coast from the inland British system of lines. A breakwater and port have been built there and the trade is considerable being chiefly transit trade from British territory. The international transit of Mormugoa port was in 1926 about Rs. 440 lakhs.

The People.

The total population of Goa was 531,952 at the census of 1921. This gives a density of 408 persons to the square mile and the population showed an increase of 9 per cent. since the census ten years previously. In the Velhas Conquistas the majority of the population is Christian. In the Novas Conquistas Hindus are more numerous than Christians. The Moslems in the territory are numbered in a few thousands. The Christians still very largely adhere to caste distinctions, claiming to be Brahmans, Charados and low castes, which do not intermarry. The Hindus who form about one-half of the total population are largely Maratha and do not differ from those of the adjacent, Konkan districts of Bombay. All classes of the people, with the exception of Europeans, use the Konkani dialect of Marathi with some admixture of Portuguese words. The official language is Portuguese, which is commonly spoken in the capital and the principal towns as well as by all educated people. Nearly all the Christians profess the Roman Catholic religion and are spiritually subject to an archbishop who has the titles of Primate of the East and Patriarch of the East Indies and exercises ecclesiastical jurisdiction also over a portion of British India, and the provinces of Macau (China) and Timor (Oceania), with missions in foreign countries and Mocambique (Portuguese East Africa). The Christians of Daman and Diu are subject under a new Treaty signed in 1928 between Portugal and the Holy see to the Archbishop of Goa. There are numerous churches in Goa, mostly built by the Jesuits and Franciscans prior to the extinction of the religious orders in Portuguese territory. The churches are in charge of secular priests. Hindus and Mahomedans now enjoy perfect freedom in religious matters and have their own places of worship. In the early days of Portuguese rule the worship of Hindu gods in public and the observance of Hindu usages were strictly forbidden and rigorously suppressed.

The Country.

A little over one-third of the entire territory of Goa is stated to be under cultivation. The fertility of the soil varies considerably according to quality, situation and water-supply. The Velhas Conquistas are as a rule better and more intensively cultivated than the Novas Conquistas. In both these divisions a holding of fifteen or sixteen acres would be considered a good sized farm but the majority of holdings are of much smaller extent varying from half an acre to five or six acres. The staple produce of the country is rice, of which there are two good harvests, but the quantity produced is barely sufficient to meet the needs of the population for two-thirds of the year. Next to rice, the culture of cocoanut palms is deemed most important, from the variety of uses to which the products are applied. Hilly places and inferior soils are set apart for the cultivation of cereals and several kinds of fruits and vegetables are

cultivated to an important extent. The condition of the agricultural classes in the Velhas Conquistas has improved during recent years, owing to the general rise in the prices of all classes of agricultural produce and partly to the current of emigration to British territory. There is a great shortage of agricultural labour in the Velhas Conquistas, and the cultivation of rice fields is now practically controlled by the Hindu population. In the summer months bands of artisans and field labourers from the adjoining British territory make their way into Bardez where the demand for labour is always keen. Stately forests are found in the Novas Conquistas. They cover an area of 116 square miles and are under conservation and yield some profit to the administration. Iron is found in parts of the territory; but has not been seriously worked. Manganese also exists and some mines are being worked at present, the ore being exported to the Continent.

Commerce.

In the days of its glory, Goa was the chief entrepot of commerce between East and West and was specially famous for its trade in horses with the Persian Gulf. It lost its commercial importance with the downfall of the Portuguese Empire and its trade is now insignificant.

The present trade of Goa is not very large. Its imports amount to about Rs. 160 lakhs and exports to about Rs. 40 lakhs. The discrepancy is met from the money sent to Goa by the many emigrants who are to be found all over the world. Few manufacturing industries of any moment exist and most manufactured articles in use are imported. Exports chiefly consist of cocoanuts, betel nuts, mangoes and other fruits and raw produce.

A line of railway connects Mormugao with the Madras and Southern Mahratta Railway. Its length from Mormugao to Castle Rock above the Ghats where it joins the British system, is 51 miles, of which 49 are in Portuguese territory. The railway is under the management of the Madras and Southern Mahratta Railway administration, and the bulk of the trade of Mormugao port is what it brings down from and takes to the interior. The telegraphs in Portuguese territories are worked as a separate system from the British. The latter, however, had an office at Nova-Goa maintained jointly by the two Governments but since 1925 the Nova-Goa office has been handed over to the Portuguese Government which now maintains and works all the telegraphs in its territories.

Taxes and Tariffs.

The country was in a state of chronic financial equilibrium for nearly sixty years with occasional exceptions. The last war enhanced the deficits to alarming proportions and these were met by fresh taxes and new loans. Most of the new taxes were the result of the initiative of the Governor-General Jaime de Morais, who is popularly known as the "Governor of Taxes." Only in 1927 the country experienced the joys of a balanced budget and the public servants whose salaries had always remained in arrears are now being paid regularly. There is an estimated surplus of about a lakh and a half which has been ear-marked for promoting the industrial progress of the country. If municipal and national taxes be added together, the country presents a very high incidence of taxation, even higher than that of British India, the average coming to about Rs. 8-8 *per capita.* There is no income-tax, except for government servants, but there is a special ten per cent tax on all incomes derived in the shape of interest on loans. This tax is a powerful contributory cause to the flight of capital from Portuguese India. The chief sources of revenue are the land tax, Excise and the customs. There is a special tax on emigrants which yields to the State about Rs. 60,000 The country being economically backward, the taxes give very little indication of its productive capacity or of its annual wealth. The national wealth is a matter of pure conjecture for lack of statistics.

The tariff schedule is based on the three-fold principle, fiscal, protective and preferential. There is a limited free list on which books and paper figure prominently. The fiscal tariff ranges from 10 to 30 per cent. according to the nature of the commodities, but the duties in several cases are specific, not *ad valorem.* This causes considerable hardship to trade, and specially to the poorer classes of consumers. The preferential tariff applies to goods coming from Lisbon and the Portuguese Colonies. Very recently the principle of protection has been extended to the export of canned fruits which are entitled to a bounty of 10 per cent. on their basic price.

The Capital.

Nova-Goa, the present capital of Portuguese India, comprehends Panjim and Ribandar, Old Goa is some six miles distant from the new city. Panjim occupies a narrow strip of land leading up to the Cabo, the cape dividing the Aguada bay from that of Mormugao, and mainly slopes down to the edge of the Aguada. It was selected as the residence of the Portuguese Viceroy in 1759, and in 1843 it was raised to its present rank as the capital of Portuguese India. The appearance of the city, with its row of public buildings and elegant private residences, as seen from the water is very picturesque and this impression is not belied by a closer inspection of its neat and spacious roads, bordered by decent, tidy houses. The most imposing public structures are the barracks, an immense quadrangular building the eastern wing of which accommodates the Primary School, the Public Library and the Government Press. Other noticeable buildings are the Cathedral and various churches, the viceregal palace, the High Court and so on. The square in the lower part of the town is adorned with a life-sized statue of Albuquerque standing under a canopy.

History.

Goa was captured for the Portuguese by Alfonso de Albuquerque in 1510. Albuquerque promptly fortified the place and established Portuguese rule on a firm basis. From this time Goa rapidly rose in importance and became the metropolis of Portuguese power in the East. There was constant fighting with the armies of the Bijapur kingdom, but the Portuguese held their own and gained the surrounding territory now known as the Velhas Conquistas.

The subsequent history of the town is one of ostentation and decay. Goa reached its summit of prosperity at the end of the sixteenth century. The accounts of travellers show that the Goa of those days presented a scene of military, ecclesiastical and commercial magnificence which has had no parallel in the British capitals of India. Portugal, however, with its three millions of population was too small to defend itself against Spain and maintain at the same time its immence Empire in the four Continents. Albuquerque tried to consolidate Portuguese rule in India by his policy of attracting the conquered Indians and granting them civil and religious liberties. His contemporaries, however, could not understand his far-seeing statesmanship and after his death they undid all his work basing their dominion on conquest by the sword and military force and they laboured to consolidate it by a proselytising organisation which throws all the missionary efforts of every other European power in India into the shade. Old Goa, as the ruins of the old capital are called to-day, had a hundred churches, many of them of magnificent proportions, and the Inquisition which was a power in the land. The sixty years' subjection to Spain in the 17th century completed the ruin of the Portuguese Empire in the East and though the Marquis of Pombal in the 18th century tried to stave off its decadence, his subordinates in far-off India either could not understand or would not carry out his orders and even his strong hand was unable to stop the decline. It was in the 19th century that the colonials began to enjoy full Portuguese citizenship and sent their representatives to the Parliament in Lisbon.

Modern Times.

There was frequently recurring fighting and in 1741 the Marathas invaded the neighbourhood of Goa and threatened the city itself. An army of 12,000 men arrived from Portugal at the critical moment. The invaders were beaten off, and the Novas Conquistas were added to the Portuguese possessions. In 1844 the shelter given by Goa to fugitives from justice in British territory threatened to bring about a rupture with the British Government at Bombay. In 1852 the Ranes of Satari, in the Novas Conquistas, revolted. In 1871 the native army in Goa mutinied and the King's own brother came from Lisbon to deal with the trouble and having done so disbanded the native army, which has never been reconstituted. But another outbreak among the troops took place in 1895 and the Ranes joining them the trouble was again not quieted until the arrival of another special expedition from Lisbon. The Ranes again broke out in 1901 and again in 1912, troops being again imported to deal with the last outbreak, which was only reported concluded in the summer of 1913. There has been no outbreak after that date.

The people on the whole appear to be quite satisfied with the Portuguese connection. There is no agitation for further reforms as in British India and not a sign of disaffection against Portuguese rule. This is chiefly due to the fact that under the present regime the natives of Goa enjoy complete equality with the natives of Portugal, many of the sons of Goa occupying high and responsible positions in Portugal. Thus Elvino de Britto who was Minister of Public Works towards the end of the last century was a native of Goa as was the father of Dr. Bettencourt Rodrigues, Minister for Foreign Affairs in General Carmonas dictatorial Government. Natives of Goa are also Dr. Almeida Arez, the President of the Supreme Court in Lisbon, Dr. Caeteno Gonsalves, Judge of the same Court and Mr. Alberto Xavier, Secretary-General of the Ministry of Finance.

Administration.

The Lisbon Government by Decree No. 3266, dated 27th July 1917, enacted new rules regarding the administration of Portuguese India under an Organic Charter (Carta Organica) in force since 1st July 1919. This Charter, regarding civil and financial administration of the colony, was modified by rules Nos. 1005 and 1022, dated 7th and 20th August 1920, and decrees Nos. 7008 and 7030, dated 9th and 16th October. A new Organic Charter modifying in certain parts the earlier one was granted by Decree No. 12,499 of 4th October 1926 and is now in force.

The territory of Portuguese India is ruled by one Governor-General, residing in the Capital of the State, at Panjim *alias* Nova-Goa, and is divided into three districts: Goa, Daman and Diu. The last two are each under a Lieutenant-Governor. The district of Goa is under the direct superintendency of the Governor-General.

Subordinate to the Governor-General the following Secretariats are working: Home and Political, Finance, Customs, Education, Military, Naval, Agriculture, Health and Public Works. There are also three special and autonomous Departments, which do not constitute exclusive Secretariats, one of them being the Department of Posts and Telegraphs, the second that of Survey and the third that of the Fiscal of the W. I. P. Railway.

As the principal organ of administration next to the Governor-General and in collaboration with him works a Governor's Council (*Conselho do Governo*) with Legislative and advisory powers. The Council is constituted, in addition to the Governor-General, *ex-officio* President, of four officials (Attorney-General, the Director of Finances, the Director of Civil Administration and the Director of Public Works), five elected members (three representing *Velhas, Conquistas*, one the *Novas Conquistas* and one the Districts of Daman and Diu) and five members nominated by the Governor-General to represent the minorities, agricultural, commercial and other interests and the press.

In each province of Goa, Daman and Diu, there is a District Council to supervise the Municipalities and other local institutions. The District Council of Goa is composed of the Director of Civil Administration, President, the Government Prosecutor of the Nova-Goa Civil Court; the Deputy Chief Health Officer; the Engineer next to the Director of Public Works; the Deputy Director of Finances; the Chairman of the Municipal Corporation of the Islands; one member elected by the Commercial and Industrial Associations of the district; one member elected by the 60 highest tax payers of Goa; one member elected by the Associations of Land-

owners and Farmers of the District; and one member advocates elected by the Legislative Council among the legally qualified.

At Daman and Diu the corresponding body is composed of the local Governor, President, the Government Prosecutor, the Chief of the Public Works Department, the Health Officer, the Financial Director of the district, the Chairman of the Municipal Corporation, two members elected by 40 highest tax payers of the District and one member elected by the Merchant Industrialists and Farmers of the district.

Under the provisions of the above quoted Decree is also officiating in the capital of Portuguese India a administrative court tribunal to take cognizance and decide all litigious administrative matters, fiscal questions and accounts. It is named *Tribunal Adminisrativo Fiscal e de Contas* and is composed of the Chief Justice as President, four High Court judges, one superior Government officer, who must be a Bachelor of Laws, nominated by the Government and a citizen, who is not an official elected by the Governor-General's Council. When matters regarding finances and accounts come up for decision and discussion the Director of Finances also sits on this Tribunal.

Under the presidency of the Governor-General the following bodies are also working:—

Technical Council of Public Works.—Its members are all engineers on permanent duty in the head office, a military officer of highest rank in the army or navy, the Director of Finances, the Attorney-General, the Chief Health Officer and a Secretary being a clerk of the Public Works Department appointed by the Director of Public Works.

Council of Public Instruction.—This Council presided over by the Governor-General is composed of five officials: the Director of Civil Administration, the Director of the Medical College, the Director of the Lyceum, the Director of the Normal School and the Inspector of Primary Schools, and four nominated members.

There is one High Court in the State of Indias with five Judges and one Attorney-General; and Courts of Justice at Panjim, Margao, Mapuçá, Bicholim, Quepêm e Damão; and Municipal Courts of Justice at Mormugão (Vasco da Gama), Pondá Diu and Nagar-Aveli.

PORT OF MORMUGAO.

Mormugão is situated towards the south of Aguada Bar, on the left Bar, on the left bank of Zuary River in Lat. 15° 25'N. and Long. 73° 47' E., about 225 miles south of Bombay and 6½ miles south of Panjim, the Capital of Portuguese India. The Port of Mormugão is the natural outlet to the sea for the whole area served by the M. & S. M. Ry. (metre-gauge), and offers the shortest route both passenger and goods traffic. The distance from Aden to Mormugão is about the same as from Aden to Bombay. The Port is provided with lighthouses, buoys and all necessary marks and it is easily accessible all the year round and at any hour of the day or night even without the assistance of a Pilot. Pilotage is not compulsory, but when usual pilot flag is hoisted, a qualified officer will board the vessel and render such assistance.

Mormugão Harbour is the terminal station of the West of India Portuguese Railway which is controlled by the Madras and Southern Maharatta Railway Company, with headquarters at Madras. Goods are shipped direct from Mormugão to any Continental Ports every facility being afforded for such direct shipments. Cargo can be unloaded from or loaded direct into Railway wagons, which run alongside steamers, thus reducing handling. Warehouses are built on the quay and have railway sidings alongside. Steamers of over 5,000 tons net register, from any Continental Ports can be discharged or loaded rapidly and in complete safety, in a working day of 10 hours 650 tons iron work or 800 tons bale or bag cargo can easily be loaded or discharged. The port is provided with steam cranes and all other appliances for quick loading and discharging of vessels, one of the cranes being of 30 tons capacity for discharging heavy lifts. The tonnage, quay dues and all other charges are very low, special concessions being granted for steamers arriving from European or American Ports touching Lisbon. Fresh water can be obtained at a low cost.

The Bombay Steam Navigation Company's (Shepherd) steamers between Bombay and Mangalore call at Mormugão twice a week. The British India Steam Navigation Company's steamers between Bombay and Africa call at Mormugão at least once a month. The Ellerman Strick Line maintains a regular service from Liverpool to Mormugão calling occasionally at Lisbon. This service offers every facility for shipment from the United Kingdom to stations on the M. & S. M. Railway under the "Combined Sea and Rail Through Bills of Lading." There are several stevedoring firms, the maximum rate for discharging or loading coal and general cargo being fixed by Government at 6 annas per ton, deadweight. Goods for British India pass through Goa without any charge being collected by Portuguese Government. British Customs duty payable at Castle-Rock can be paid by the Railway Company and collected at destination. Goods from stations on the M. & S. M. Ry. System to Mormugão or *vice-versa* are railed without transhipment, thus avoiding a second handling. Steam tugs, barges, etc., for unloading in the stream can be had at a very low charge.

With a view to promoting the economical, commercial and industrial development of Mormugão, a special Department under the designation of the "Mormugão Improvement Trust" with its head office at Vasco da Gama, 2 miles from Mormugão Harbour, has been created and the Local Government have introduced various regulations granting every facility to those intending to raise buildings for residential and industrial purposes in the whole area, comprising about 300 acres, near the Harbour. There are over 2,000 plots, each measuring between 1,000 and 2,000 square metres (each square yard—0·8361 square metre), available for residential quarters, granted on permanent lease on each payment of 2 annas to Rs. 1-8 per square metre, according to their situation, in addition to an annual payment of 4 pies per square metre as lease-hold rent

Within about 60 days from the date of application for a plot, the same is made over to the applicant or to the highest bidder, should there be more than one applicant for one and the same plot. The plan of buildings is in all cases subject to the approval of the Chairman of the Improvement Trust, such plan being required to be submitted within 60 days from the date the plot is made over to the lessee, and the period within which building is to be completed is 2 years. Importation of building materials is allowed free of Custom duties. In addition to the above, there is an extensive area available and reserved only for Industrial and Commercial Establishments, this area being known as "Free Zone". Within this "Free Zone," in addition to plots, which are leased at a very low rate for building factories, bonded warehouses or for establishment of any kind of industrial or commercial concerns, in accordance with rules and regulations lately issued by the local Government, special concessions and privileges are granted, such as:

(*I*) *For Establishment of Factories or Industrial Concerns.*—All machinery, building materials, tools, raw materials, etc., required for construction, maintenance and regular working of the Factories are permitted free of import duty, likewise export of the goods manufactured within the "Free Zone."

(*II*) *For Establishment of Depots of Manufactured or Unmanufactured Goods, Bonded Warehouses, etc., etc.*—All goods imported by the Concessionaire for the purpose of such depot are allowed to be exported to any Foreign territory, after being improved and repacked, if necessary, without payment of either import or export duty.

(*III*) *Exemption of Government Taxes.*—In addition to the above privileges, all Factories, Commercial Establishments, buildings, etc., within the "Free Zone" are exempt from all Government taxes for a period of 20 years from May 1923. Applications for any of the above concessions have to be addressed to H.E. the Governor-General of Portuguese India and presented at the office of the Mormugão Improvement Trust at Vasco da Gama, giving therein full particulars of the area and plot, etc., required. Such applications are disposed of within as little time as possible. Full information can be obtained from the Mormugão Improvement Trust, Vasco da Gama.

DAMAN.

The settlement of Daman lies at the entrance to the Gulf of Cambay, about 100 miles north of Bombay. It is composed of two portions, namely, Daman proper, lying on the coast, and the detached pargana of Nagar Aveli, separated from it by a narrow strip of British territory and bisected by the B. B. & C. I. Railway. Daman proper contains an area of 22 square miles and 26 villages and has a population (1921) of 17,566 of whom 1,480 are Christians. The number of houses is according to the same census 4,095. Nagar Aveli has an area of 60 square miles and a population (1921) of 31,048, of whom only 271 are Christians. The number of houses is 6,069. The town of Daman was sacked by the Portuguese in 1531 rebuilt by the natives and retaken by the Portuguese in 1558, when they made it one of their permanent establishments in India. They converted the mosque into a church and have since built eight other places of worship. The native Christians adopt the European costume, some of the women dressing themselves after the present European fashion, and others following the old style of petticoat and mantle once prevalent in Spain and Portugal.

The soil of the settlement is moist and fertile, especially in Nagar Aveli, but despite the ease of cultivation only one-twentieth part of the territory is under tillage. The principal crops are rice, wheat, the inferior cereals of Gujarat and tobacco. The settlement contains no minerals. There are stately forests in Nagar Aveli, and about two-thirds of them consist of teak, but the forests are not conserved and the extent of land covered by each kind of timber has not been determined. Before the decline of Portuguese power in the East, Daman carried on an extensive Commerce especially with the east coast of Africa. In those days it was noted for its dyeing and weaving.

The territory forms for administrative purposes a single district and has a Municipal Chamber and Corporation. It is ruled by a Governor invested with both civil and military functions, subordinate to the Governor-General of Goa. The judicial department is administered by a judge, with an establishment composed of a delegate of the Attorney-General and two clerks. In Nagar Aveli the greater part of the soil is the property of the Government, from whom the cultivators hold their tenures direct. A tax is levied on all lands, whether alienated or the property of the State. The chief sources of revenue are land-tax, forests, excise and customs duties.

DIU.

Diu is an island lying off the southern extremity of the Kathiawar Peninsula, from which it is separated by a narrow channel through a considerable swamp. It is composed of three portions, namely, Diu proper (island), the village of Gogla, on the Peninsula, separated by the channel, and the fortress of Simbor, about 5 miles west of the island. It has a small but excellent harbour, where vessels can safely ride at anchor in two fathoms of water and owing to the great advantages which its position offers for trade with Arabia and the Persian Gulf, the Portuguese were fired at an early period with a desire to obtain possession of it. This they gained, first by treaty with the Sultan of Gujarat and then by force of arms. Diu became opulent and famous for its commerce. It has now dwindled into insignificance. The extreme length of the island is about seven miles and its breadth, from north to south, two miles. The area is 20 square miles. The population of the town of Diu, from which the island takes its name, is said to have been 50,000 in the days of its commercial prosperity. The total population of the island, according to the census of 1921, is 13,844, of whom 228 were Christians.

FRENCH POSSESSIONS.

The French possessions in India comprise five Settlements, with certain dependent lodges, or plots. They aggregate 203 square miles, and had a total population in the first January 1927 of 284,432. The first French expedition into Indian waters, with a view to open up commercial relations, was attempted in 1603. It was undertaken by private merchants at Rouen, but it failed, as also did several similar attempts which followed. In 1642 Cardinal Richelieu founded the first Campagnie d'Orient, but its efforts met with no success. Colbert reconstituted the Company on a larger basis in 1664, granting exemption from taxes and a monopoly of the Indian trade for fifty years. After having twice attempted, without success, to establish itself in Madagascar, Colbert's Company again took up the idea of direct trade with India and its President, Caron, founded in 1668 the Comptoir, or agency, at Surat. But on finding that city unsuited for a head establishment he seized the harbour of Trincomalee in Ceylon from the Dutch. The Dutch, however, speedily retook Trincomalee; and Caron, passing over to the Coromandel coast, in 1672, seized St. Thome, a Portuguese town adjoining Madras, which had for twelve years been in the possession of Holland. He was, however, compelled to restore it to the Dutch in 1674.

The ruin of the Company seemed impending when one of its agents, the celebrated Francois Martin, suddenly restored it. Rallying under him a handful of sixty Frenchmen, saved out of the wreck of the settlements at Trincomalee and St. Thome, he took up his abode at Pondicherry, then a small village, which he purchased in 1683 from the Raja of Gingee. He built fortifications, and a trade began to spring up; but he was unable to hold the town against the Dutch, who wrested it from him in 1693, and held it until it was restored to the French by the Peace of Ryswick, in 1697. Pondicherry became in this year and has ever since remained, the most important of the French Settlements in India. Its foundation was contemporaneous with that of Calcutta. Like Calcutta, its site was purchased by a European Company from a native prince, and what Job Charnock was to Calcutta Francois Martin proved to Pondicherry. On its restitution to the French by the Peace of Ryswick in 1697, Martin was appointed Governor, and under his able management Pondicherry became an entrepot of trade.

Chandernagore, in Lower Bengal, had been acquired by the French Company in 1688, by grant from the Delhi Emperor; Mahé, on the Malabar Coast, was obtained in 1725-6, under the government of M. Lenoir; Karikal, on the Coromandel Coast, under that of M. Dumas, in 1739. Yanaon, on the coast of the Northern Circars, was taken possession of in 1750, and formally ceded to the French two years later.

Administration.

The military command and administration-in-chief of the French possessions in India are vested in a Governor, whose residence is at Pondicherry. The office is at present held by Monsieur de Guise. He is assisted by a Chief Justice and by several "Chefs de Service" in the different administrative departments. In 1879 local councils and a council-general were established, the members being chosen by a sort of universal suffrage within the French territories. Seventeen Municipalities, or Communal Boards, were erected in 1907, namely, Pondicherry, Ariancoupam, Modeliarpeth, Oulgaret, Villenour, Tiroubouvane, Bahour and Nettapacam, for the establishment of Pondicherry; Karikal, Neravy, Nedouncadou, Tirunalar, Grande Aldée, Cotchéry, for the establishment of Karikal, and also Chandernagore, Mahé and Yanaon. On municipal boards natives are entitled to a proportion of the seats. Civil and criminal courts, courts of first instance and a court of appeal compose the judicial machinery. The army and establishments connected with the Governor and his staff at Pondicherry, and those of administrators at Chandernagore. Yanaon, Mahe and Karikal, together with other headquarters charges necessarily engross a large proportion of the revenue. All the state and dignity of an independent Government, with four dependent ones, have to be maintained. This is effected by rigid economy, and the prestige of the French Government is worthily maintained in the East. Pondicherry is also the scene of considerable religious pomp and missionary activity. It forms the seat of an Archbishop, with a body of priests for all French India; and of the Missions Etrangeres, the successors of the Mission du Carnatic founded by the Jesuits in 1776. But the chief field of this mission lies outside the French Settlements, a large proportion of its Christians are British subjects and many of the churches are in British territory. The British rupee is the ordinary tender within French territories. A line of railway running *via* Villenour, from Pondicherry to Villupuram on the South Indian Railway, maintains communication with Madras and the rest of British India, and Karikal is linked to the same railway by the branch from Peralam. A Chamber of Commerce consisting of fifteen members, nine of them Europeans or persons of European descent, was reorganised by a decree of 7th March, 1914. The capital, Pondicherry, is a very handsome town, and presents, especially from the sea, a striking appearance of French civilisation.

People and Trade.

The Settlements are represented in Parliament at Paris by one senator and one deputy. The Senator is Mons. P. Bluysen. The Deputy is Mons. Coponat. There were in 1926 59 primary schools and 3 colleges all maintained by the Government, with 300 teachers and 10,459 pupils. Local revenue and expenditure (Budget of 1927) Rs. 2,835,350. The principal crops are paddy, groundnut, and ragi. There are at Pondicherry 3 cotton mills, and at Chandernagore 1 jute mill; the cotton mills have, in all, 1,635 looms and 72,067 spindles, employing 8,225 persons. There are also at work one oil factory and a few oil presses for groundnuts, one ice factory, one iron works and a cocotine factory.

The chief exports from Pondicherry are oil seeds. At the ports of Pondicherry, Karikal, and Mahé in 1926 the imports amounted to Rs. 10,137,752 and the exports to Rs. 26,285,194. At these three ports in 1926, 336 vessels entered and cleared; tonnage 99,059T. Pondicherry is visited by French steamers, sailing monthly between Colombo and Calcutta in connection with the Messageries Maritimes. The figures contained in this paragraph are the latest available and are corrected up to December 1926.

PONDICHERRY.

Pondicherry is the chief of the French Settlements in India and its capital is the headquarters of their Governor. It is situated on the Coromandel Coast, 105 miles from Madras by road and 122 by the Villupuram-Pondicherry branch of the South Indian Railway. The area of the Settlement is 115 square miles and its population in the first January 1927 was 284,432. It consists of the eight communes of Pondicherry. The Settlement was founded in 1674 under Francois Martin. In 1693, it was captured by the Dutch but was restored in 1699. It was besieged four times by the English. The first siege under Admiral Boscawen in 1748 was unsuccessful. The second, under Eyre Coote in 1761, resulted in the capture of the place, which was restored in 1765. It was again besieged and captured in 1778 by Sir Hector Munro, and the fortifications were demolished in 1779. The place was again restored in 1785 under the Treaty of Versailles of 1783. It was captured a fourth time by Colonel Braithwaite in 1793, and finally restored in 1816.

The Settlement comprises a number of isolated pieces of territory which are cut off from the main part and surrounded by the British District of South Arcot, except where they border on the sea. The Collector of South Arcot is empowered to deal with ordinary correspondence with the French authorities on these and kindred matters, and in this capacity is styled the Special Agent. At Pondicherry itself is a British Consular Agent accredited to the French Government, who is usually an officer of the Indian Army. The town is compact, neat and clean, and is divided by a canal into two parts, the Ville blanche and the Ville noire. The Ville blanche has a European appearance, the streets being laid at right angles to one another with trees along their margins reminding the visitor of continental boulevards, and the houses being constructed with courtyards and embellished with green venetians. All the cross streets lead down to the shore, where a wide promenade facing the sea is again different from anything of its kind in British India. In the middle is a screw-pile pier, which serves, when ships touch at the port, as a point for the landing of cargo, and on holidays as a general promenade for the population. There is no real harbour at Pondicherry; ships lie at a distance of about a mile from the shore, and communication with them is conducted by the usual *masula* boats of this coast. Facing the shore end of the pier is a statue of the great Dupleix, to whom the place and the French name owed so much.

CHANDERNAGORE.

Chandernagore is situated on the bank of the Hooghly, a short distance below Chinsura. Population (in the first January 1927) 26,595. The town was permanently occupied by the French in 1688, though previously it had been temporarily occupied by them at a date given as 1672 or 1676. It did not, however, rise to any importance till the time of Dupleix. It changed hands between British and French various times during the Napoleonic wars and was finally restored to the French in 1816.

The former grandeur of Chandernagore has disappeared, and at present it is little more than a quiet suburban town with little external trade. The railway station on the East Indian Railway is just outside French territory 22 miles from Calcutta (Howrah). The chief administrative officer is the Administrator who is subordinate to the Governor of the French Possessions. The chief public institution is the College Dupleix, formerly called St. Mary's institution, founded in 1882 and under the direct control of the French Government.

KARIKAL.

Karikal lies on the Coromandel Coast between the Tanjore District of Madras and the Bay of Bengal. The settlement is divided into six communes, containing 110 villages in all, and covering an area of 53 square miles. It is governed by an Administrator subordinate to the Governor at Pondicherry. The population has in recent years rapidly decreased. In 1883 it was 93,055; in 1891, 75,526; in 1901, 54,603; in 1923, 57,023; in 1924, 56,922; in 1925, 279,663 and in 1927, 284,432; but the density is still very high, being 1,068 persons per square mile. Kumbakonam is the only taluk in Tanjore District which has a higher density. Each of the six communes—namely, Karikal, La Grande Aldee, Nedungadu, Cotchéry, Néravy and Tirnoular—possesses a mayor and council. The members are all elected by universal suffrage, but in the municipality Karikal half the number of seats are reserved for Europeans or their descendants. The country is very fertile, being irrigated by seven branches of the Cauvery, besides many smaller channels.

The capital of the settlement is situated on the north bank of the river Arasalar, about $1\frac{1}{2}$ miles from its mouth. It has a brisk trade in rice with Ceylon, and to a less extent with the Straits Settlements. It has no commerce with France, and very little with other French colonies. The port is merely an open roadstead, provided with a light-house 142 feet high, the light in which has a range of from 8 to 10 miles. In 1899 Karikal was connected with Paralem on the Tanjore District Board Railway. Karikal finally came into French possession on the settlement after 1815.

The Frontiers.

By those who take a long view of politics in the wide sense of the term, it will be seen that the Indian Frontier problem, which has loomed so large in the discussion of Indian questions, has always borne a two-fold character—the local issue and the international issue. For almost a century the international issue was the greater of the two, and the most serious question which the Indian Government, both directly and as the executors of British Imperial policy, had to face. But the tendency of recent times has been for the international aspect to recede and for the local aspect to grow in importance, until now it may be said, with as much truth as characterises all generalisations, that the local issue dominates, if it does not absorb the situation.

The Local Problem.—The local problem, in its broadest outlines, may be briefly indicated before proceeding to discuss it in detail. From the Arabian Sea on the West to the confines of Nepal is a wild and troublous sea of the highest mountains in the world. The thin valleys in these immense ranges are poorly populated by hardy, brave, militant mountaineers, rendered the fiercer and the more difficult by professing the martial Moslem faith, accentuated by the most bitter fanaticism. But sparse as the population is, it is in excess of the supporting power of the country. Like mountaineers in all parts of the world, these brave and fearless men have sought to eke out their exiguous agriculture by raiding the rich plains of Hindustan. We may find a fairly close parallel to the situation in the position of the Highlands of Scotland until after the rebellion of 1745 the English Government of the day sought a permanent remedy by opening for the warlike Highlanders a military career in the famous Highland regiments, and in rendering military operations easier by the construction of Wade's road. The Highland problem has disappeared so long from English politics that its pregnant lessons are little realised, but if the curious student will read again that brilliant novel by Neil Munro, "The New Road," he will appreciate what Wade's work meant for the Highlands of Scotland, and what lessons it teaches those who are called upon to face, in its local aspect, the Indian frontier problem. So far as the area with which we are dealing was concerned, two policies were tried. In Baluchistan, the genius of Sir Robert Sandeman devised the method of entering into military occupation of the principal points, and thence controlling the country. At the same time close engagements were entered into with the principal chiefs, through whom the tribesmen were kept in order. That policy was so successful that whilst the administration was expensive the Baluchistan frontier did not seriously embarrass the Government of India from the time when Sandeman set his mark on the land. Not that the country was entirely peaceful. Occasional tribal raids or risings necessitated occasional military operations, and the Gomal Pass was involved in the general tribal disturbances which followed the wanton declaration of war by Afghanistan in 1919. But speaking broadly, Sandeman brought peace to Baluchistan, and to the large frontier area which is embraced in that generic term. So far as this section of the frontier is concerned it may be said that no frontier problem exists, save the need for an economical and constructive policy.

Towards Afghanistan.—Far otherwise is it with the section of the frontier which stretches from Baluchistan to the confines of Nepal. That has, for three quarters of a century, been the scene of almost ceaseless military operations, which have constituted a devastating drain on the Indian exchequer. One seeks in vain for a clear and definite policy guiding the actions of the Government of India. One explanation of these inconsistencies is found in the existence of two schools of thought. Once the frontier with Afghanistan had been delimited, the soldiers naturally pressed for the armed occupation of the whole country right up to the confines of Afghanistan, or at any rate, for military posts, linked with good communications, which would dominate the country. But those who looked at policy not only from the military standpoint, were conscious of two considerations. They saw that occupation up to the Afghan frontier only meant the shifting of the frontier problem farther North. Instead of the differing tribes, we should have to meet the Afghan on our border line. If Afghanistan were a strong, homogeneous State, that would be a matter of little account. But even under the iron rule of Abdurrahaman Khan, the Amir's writ ran but lightly in the southern confines of his kingdom. Under his successor, Habibullah Khan, whose policy was generally wise and successful, it ran still less firmly. The Amir was unable to control the organisation of the tribal gatherings which involved us in the Zakka Khel and Mohmand expeditions during the Indian secretaryship of that arch pacifist, Lord Morley. Nor did it enable Habibullah to deal effectively with a rising against his own Governor in Khost. The Afghan forces melted away under transport difficulties when they were moved against the rebellious Khostwalis, and the Amir had to make peace with his troublous vassals. Therefore the occupation of the frontier up to what is called the Durand Line, because it is the line demarcated by Sir Mortimer Durand as the British Plenipotentiary, would simply have meant that in time of trouble we should have to deal with Afghanistan instead of a tribe or two, and with the irreconcilable tribesmen along our difficult line of communications. There was the further consideration that financiers were of the sound belief that even if the Forward Policy was wise from the military standpoint, it would involve charges over an indefinite period greater than the Indian finances would bear. Moreover on this section of the Frontier, the position was complicated by the expansion of Russia in Central Asia. The easiest passes, and the passes down which for centuries from the time of Alexander the Great invaders have swept from Persia and Central Asia to loot the fat plains of Hindustan, traverse this region. Therefore it was deemed essential to control, if not to occupy them, in the interests of the Imperial situation. In this zone therefore policy ebbed and flowed between the Forward School, which would have occupied, or dominated, the whole Frontier up to the Durand Line, that is to say up to the Afghan frontier; and the

Close Border School, which would have us remain out of the difficult mountainous zone and meet the tribesmen on the plains if they sallied forth. The extreme advocates of this school would even have had us return to the line of the Indus.

The Two Policies.— The result of this conflict of opinion was a series of wavering compromises, which like all compromises was profoundly unsatisfactory. We pushed forward posts here and there, which irritated the Tribesmen, and made them fearful of their prized independence, without controlling them. These advanced posts were in many cases inadequately held and rarely were they linked with their supporting posts by adequate means of communication. We preserved between our administrative frontier, and the Durand Line which demarcated our frontier with Afghanistan an irregular belt of land called The Independent Territory, in which neither we nor the Afghan Government exercised jurisdiction. This was left entirely under the control of the tribes who peopled it. Now it has often been asked why we did not follow the precedent of Baluchistan and "Sandemanise" the Independent Territory. That is one of the perennial topics of Frontier discussions. It is however important to bear in mind that there were essential differences between this zone and Baluchistan. Sir Robert Sandeman found a strong tribal system existing in Baluchistan, and he was able to enter into direct engagements with the tribal chiefs. There is no such tribal organisation in the Independent Territory. The tribal chiefs, or maliks, exercise a very precarious authority, and the instrument for the collective expression of the tribal will is not the chief, but the jirgah, or tribal council, of the most democratic character, where the voice of the young men of the tribe often has the same influence, in time of excitement perhaps more influence, than the voice of the wiser greybeard. The bitter fruit of this policy of compromise was reaped in 1897, when following a minor outbreak in the Tochi Valley the general uneasiness flamed into a rising which involved the whole of the North-West Frontier, from the Gomal to the borders of Nepal. A force over thirty thousand strong had to be mobilised to deal with it. Even this large force, owing to the immense difficulties of transportation, was unable effectively to deal with the situation, though peace was made. The emergency thus created synchronised with the advent of Lord Curzon as Viceroy. He dealt with it in masterful fashion. In the first place, he separated the frontier zone from the Government of the Punjab, which had hitherto been responsible for its administration, and had organised for the purpose a special force of Frontier soldiers, known as the Punjab Irregular Frontier Force. This was the revival of a scheme as old as the viceroyalty of Lord Lytton, though no other Viceroy had been able to carry it through, in the face of the strong opposition of successive Punjab Governments. The area so separated was constituted into a separate administrative zone under the direct authority of the Government of India, exercised through a Chief Commissioner. Then Lord Curzon withdrew the advanced military posts and concentrated the Regular troops in bases better linked with the main military centres of India by roads and railways. The advanced posts, and especially important Passes like the Tochi, the Kurram and the Khyber, were entrusted to the defence of local militia, recruited from the tribesmen themselves, and officered by British officers drawn from the ranks of the Indian Army. Later it was supplemented by a fine development policy. The construction of the Upper Swat Canal, afterwards developed into the Swat Canal (*q.v.* Irrigation) led to such an increase in cultivation that the tribesmen were given a means of livelihood and were invested with the magic charm of valuable property. The irrigated part of the Frontier has since been one of the most peaceful in the whole border line.

Lord Curzon's Success.—Judged by every reasonable standard the Curzon policy was successful. It did not give us complete peace. There were occasional punitive expeditions demanded, such as for instance the Zakka Khel and Mohmand expeditions, and the Waziris, and in particular the truculent Mahsud Waziris, never ceased raiding. But in comparison with what had gone before, it gave us relative peace. It endured throughout the War, though the Waziris built up a heavy bill of offences, which awaited settlement when Government were free from the immense preoccupations of the war. It broke down under the strain of the wanton invasion of India by the Afghans in the hot weather of 1919. On February 20th the Amir Habibullah Khan was assassinated in his sleep near Jelalabad. Although he does not figure so prominently in frontier history as his iron father Abdurrahaman Khan, he nevertheless has high claims on the favourable verdict of history. None anticipated that any successor to Abdurrahaman Khan could hold in the leash of a single State the fractious, fanatical tribes who make up the population of the Afghan kingdom. Yet this Habibullah did. On occasion his attitude seemed to be equivocal, as when armed gatherings of the tribes called lashkars were permitted to assemble in Afghan territory and to invade the Independent Territory, causing the Zakka Khel and Mohmand expeditions. But we must not judge a State like Afghanistan by European standards; the Amir had often to bow before the fanatical elements amongst his own people until they had burnt their fingers by contact with the British troops. At the outset of the War he warned the Government that he might often have to do things which seemed unfriendly, but they must trust him. In truth, the position of the Amir when Turkey entered on the war, and called Moslems everywhere to arms on the side of Germany was extraordinarily difficult; he received Turkish, German and Austrian missions in Kabul, from which British representatives were still excluded. But he kept Afghanistan out of the war, and with the complete defeat of the Central Powers and their satellites, his policy was justified up to the hilt. Indeed, his success was the cause of his assassination. The irreconcilable elements in the Kingdom saw that the day of reckoning had come and strove to avert the settlement of their account by the murder. When he was done to death, his brother, Nasrullah Khan, was proclaimed Amir by the assassins. But the conscience of Afghanistan revolted against the idea of Nasrullah, the arch-fanatic of the ruling House of Kabul, ascending the throne over the blood-stained corpse of his brother. A military movement in Kabul itself

brushed him aside and installed the son of Habibullah, Amanulla Khan, on the throne. But Amanulla Khan soon found it was a thorny bed on which he lay, and encouraged by the disorders in India which followed the passing of stringent measures to deal with anarchical crime, set his troops in motion in April 25,1919, and preaching a *jehad* promised his soldiery the traditional loot of Hindustan. The Indian Army was at once set in motion, and as has always been the case the regular Afghan Army was easily beaten. Dacca was seized, Jelalabad and Kabul were frequently bombed from the air, and there was nothing to prevent our occupation of Kabul, save the knowledge gleaned from the bitter heritage of the wars of 1838 and 1878, that it is one thing to overset a government in Afghanistan, but it is quite another to set up a stable government in its stead. The Government of India wisely held their hand, and the Afghans having sued for peace, a treaty was signed on the 8th August 1919.

But an untoward effect of this wanton war was to set the Frontier from the Gomal to the Khyber ablaze. With one or two exceptions, the Tribal Militia could not stand the strain of an appeal from their fellow tribesmen, and either melted away or joined the rising. This has often been described as the failure of the Curzon policy, which was based on the tribal militia. But there is another aspect to this issue, which was set out in a series of brilliant articles which Mr. Arthur Moore, its special correspondent, contributed to *The Times*. He pointed out that the militia was meant to be a military police force. The lapse of time, and forgetfulness of its real purpose, had converted the militia into an imitation of the regular army. The Militia was meant to be a police. When the war broke out its units were treated as a covering force behind which the Regular Army mobilised. This is a role which it was never intended they should serve; exposed to a strain which they should never have been called upon to bear, they crumpled under it. If this reasoning is correct—and a strong case can be marshalled in support of it—then what has been called the failure of the Curzon policy arose from the misconception and misdirection of that policy.

Russia and the Frontier.—On the other hand, if it be admitted that the Curzon policy was sound, and that its success was marked—a proposition with which we are in general agreement—it can also be claimed that the Curzon policy owed no small measure of its success to extraneous events. The greatest external force in moulding Indian frontier policy was the long struggle with Russia. For nearly three quarters of a century a veiled warfare for predominance in Asia was waged between Great Britain and Russia. There are few pages in British foreign policy less attractive to the student of Imperial affairs. Russia was confronted in Central Asia with precisely the same conditions as those which faced England in India when the course of events converted the old East India Company from a trading corporation into a governing body. The decaying khanates of Central Asia were impossible neighbours. Confronted with an inferior civilisation, and with neighbours who would not let her alone, Russia had to advance. True, the adventurous spirits in her armies, and some of the great administrators in the Tsarist capital were not adverse to paying off on the Indian Borderland the score against Great Britain for the Crimean War, and for what the Russians thought was depriving them of the fruits of their costly victory over Turkey in 1877-78. The result was a long and unsatisfactory guerilla enterprise between the hardest spirits on both sides, accompanied by periodic panics in the British Press each time the Russians moved forward, which induced the coining, after the Russian occupation of Merv, of the generic term "Mervousness." This external force involved ?the Government of India in the humiliations of the Afghan War of 1838, with the tragic destruction of the retiring Indian force between Kabul and Jelalabad, slightly relieved by the heroic defence of Jelalabad and the firmness of General Pollock in refusing to withdraw the punitive army until he had set his mark on Kabul by the razing of the famous Bala Hissar fortress. It involved us in the second Afghan War of 1878, which left the baffling problem of no stable government in Afghanistan. There was a gleam of light when Abdurrahaman Khan, whom we set up at Kabul to relieve us of our perplexities, proved himself a strong and capable ruler, if one ruthless in his methods. But in the early eighties the two States were on the verge of war over a squabble for the possession of Penjdeh, and then men began to think a little more clearly. There began a series of boundary delimitations and agreements which clarified the situation, without however finally settling it. The old controversy broke out in another form when intrigues with a Buriat monk, Dorjieff, during Lord Curzon's viceroyalty, gave rise to the grave suspicion that the scene had only shifted to Tibet. An expedition to Lhasa rent the veil which had so long concealed the mysterious city and dispersed the miasma of this intrigue. But it was not until the conclusion of the Anglo-Russian agreement of 1907 that the two countries arrived at a stage long sought by those who looked beyond their noses. The actual authors of the Agreement were Lord Grey, the Foreign Secretary, and Lord Hardinge, formerly British Ambassador in Petrograd, but it had been desired by their predecessors, whose efforts were rendered nugatory by the intransigent attitude of the dominant forces in Petrograd. It was not until Russia was chastened on the battlefields of Manchuria by Japan, and disappeared as a sea power in the decisive battle of Tsushima, that an atmosphere was created favourable to the conclusion of an Agreement. This embraced the whole frontier zone. There were many unsatisfactory features in the Agreement, especially in regard to Persia, for which we had to pay a considerable price in the attitude of Persians in the War. But again taking long views, the Agreement fully justified itself in a broad definition of the interest of the two countries, which put an end to the period of excursions and alarms up to the outbreak of the War. Henceforward Russia ceased to be a material factor in the Indian Frontier Problem, with the exception of a brief period when the Red Army was trotted out as another bogey.

German Influence.—But as nature abhors a vacuum, so in the case of States bordered by higher civilisations, no sooner does one strong

influence recede than some other takes its place. Long before the signing of the Anglo-Russian Agreement the shadow of the German menace had begun to appear on the horizon. Imitative, not creative, in this, as in most other activities, the Germans adapted their methods from the penetration by railway which was so marked a feature of Russian expansion in Manchuria, brought to an end by the disastrous issue of the war with Japan. The seeds of the German effort were sown when the Kaiser, extending the hand of Christian fellowship to the Sultan of Turkey, Abdul-Hamed, at a time when that sovereign was ostracised by Europe for his direct complicity in the massacre of Armenians, or rather one of the massacres of Armenians, made German influence supreme at Constantinople. His theatrical tour through Palestine, which was generally treated in Europe as an exhibition of opera bouffe, soon bore fruit in the acquisition by German interests of the principal railways in Anatolia. Later it fructified more effectively in the Baghdad Railway concession, under which German interests secured the right of extending the Anatolian lines from the port of Haidar Pasha, opposite Constantinople, to a port in the Persian Gulf. Now successive British Statesmen of both parties had declared that the acquisition of a territorial foot-hold in the Persian Gulf by any power—Russia and the port of Bunder Abbas being then in view—would be regarded as an unfriendly act. There followed a replica of the period of alarums and excursions which had disfigured our relations with Russia. Undaunted, even when their endeavour to secure British co-operation in the enterprise failed, and when the Revolution in Turkey which set the Committee of Union and Progress in power entailed a temporary interruption of their influence at Constantinople, the Germans pressed forward with their enterprise. They pushed the Anatolian railways as far east as Bourgulu, and constructed a line northwards from Baghdad to Samara. They sent a mission to explore the potentialities of the port of Koweit in the Persian Gulf, and set the Turks in motion to subordinate the Sheikh of Koweit to direct Turkish sovereignty, with a nominal view to extending the Baghdad railway from Basra to Koweit, or the vicinity of Koweit at the deep water inlet behind Bubian Island. They commenced the most difficult part of the work in piercing the Amanus and Taurus ranges by a series of tunnels, and laid the rails on the other side of the mountains across the Euphrates to Ras-al-Ain. Behind this railway activity stood a grandiose policy, which is indicated in what became known in Germany as "B.B.B."—Berlin, Byzantium, Baghdad. Throughout the progress of these schemes, which did not stop short of Baghdad, but were directed through a port in the Persian Gulf, at India, the Germans were anxious to secure the co-operation of Great Britain, if they could do so on their own terms, that is to say without affecting the enterprise as a dominant German adventure. Shortly before the commencement of the war the protracted negotiations with London which had this end in view ended in a definite agreement between the two Powers. Under this agreement the Gulf section of the line was to have been British, and the other portion German. But this agreement which had not been signed became waste paper with the outbreak of the war, and the German plans vanished in thin air with the complete defeat of Turkey and Germany. Nevertheless the railway did not stand still during the war. Germany made immense efforts to complete the difficult tunnel sections and the work was substantially finished when the Armistice was signed.

The Significance of the Baghdad Railway.—The real significance of the Baghdad Railway was little appreciated in Great Britain. It was constantly pictured as a great trunk line, which would short-circuit the traditional British dominance by sea, and absorb the passenger and goods traffic from the East. This idea could only be nourished by those completely ignorant of the conditions of the Indian passenger service and the essentials of a competitive route for the carriage of merchandise. The rush of passenger traffic from India is from April to June, in order to escape the hot weather in India, and the return traffic is chiefly concentrated in October and November. From April to June the heat in Mesopotamia is appalling. To imagine that the passenger traffic from India would turn from the easy and comfortable, as well as fairly expeditious sea route from Bombay to Marseilles and thence by the easiest railway travelling outside the British Isles to Calais and London, for such a land route was an amazing chimera. The Baghdad route would have involved a sea voyage from Bombay or Karachi to Koweit or Basra, then a journey across the burning plains of Mesopotamia and Asia Minor to Haidar Pasha, then across the Straits to Constantinople, and finally right across Europe to a North Sea port. This would in any circumstances have been a costly freak journey in comparison with the sea route. Then as for the commercial aspect of the line, the natural port of the Middle East is Basra. The sea freight from England or Germany to Basra, is about one pound sterling a ton; before the war it was often down to fifteen shillings. The freight from Basra to Baghdad was from thirty shillings to two pounds a ton. To imagine again that merchandise would desert this route for a land and sea route, which would have involved a double break of bulk at Constantinople and Haidar Pasha, is again a chimera; the freight charges could not have been less than fifteen to twenty pounds a ton.

As a through route the primary purpose of the Baghdad Railway was strategic. It was designed to make the Power seated at Constantinople—and that Power the Teutons were resolved should be Germany—complete master of Asia Minor and The Middle East, and the route selected, often criticised, was the best for the rapid movement of troops to the strategic centres. As a commercial line, the Railway, if completed, would have served three zones. The western area of Turkey in Asia at Haidar Pasha. The rich lands of Anatolia at Alexandretta. The eastern zone at Basra. The Germans, it is understood, attached immense importance to the subsequent engagements with Turkey which placed them in maritime command at Alexandretta. They began to inaugurate a commercial position in the Persian Gulf through the establishment of a subsidized line of steamers run by the great Hamburg-America corporation

They strove to obtain an actual footing in the Gulf through the German house of Wonkhaus. We doubt if the Germans were ever serious in their alleged designs on Koweit, which could never have borne a more definite relation to the commerce of the Gulf than Flushing to Antwerp or Cuxhaven to Hamburg; that was one of the red herrings they drew across their trail to divert attention from their real objective, Basra, which is destined by virtue of an unchallengeable geographical and natural position to be the great port of The Middle East. These considerations have no more than an academic value now. Germany has been defeated. The Turks, now they are emerging from an isolated military despotism based on Angora, are confronted with the immense problem of re-building their bankrupt State, deprived of the most intelligent section of the old population—the Greeks and the Armenians, by massacre and expulsion—are a very uncertain factor. The completion of the through line is indefinitely postponed. But as the advantages of the route, for the purposes we have indicated, are many and great, the ultimate construction of the through line is only a matter of time, so we have placed these authoritative characteristics on record for the guidance of opinion when the project of the through route is revived, as it must be.

Turkey and the Frontier.—The position of Turkey on the Indian frontier was never of any considerable importance in itself, and never assumed any significance, save as the *avant courier* of Germany, when she passed under the tutelage of that Power, and for a limited period during the war. Although so long established in Mesopotamia, Turkey was not very firmly seated in that country; the Arabs tolerated rather than accepted Turkish rule so long as they were substantially left alone, and the administration it is understood never paid its way. For a brief period Midhat Pasha raised the status of Mesopotamia, and after the Revolution that fine soldier Nazim Pasha became a power in the land. But speaking broadly Turkey remained in Mesopotamia because it was no-one's interest, even that of the Arab, to turn her out. When however Germany developed her "B.B.B." policy, Turkey was used as a stalking horse. She moved a small force to the Peninsula of Al-Katr in order to frighten the Sheikh of Bahrein, and tried to convert the nominal suzerainty exercised, or rather claimed, over the Sheikh of Koweit into a *de facto* suzerainty, exercised by military force. These efforts faded before the vigorous action of the British Government which concluded a binding arrangement with the Sheikh of Koweit, and the position of the Turks at Al Katr was always very precarious. On the outbreak of the war however the situation changed. When the sound and carefully executed expedition to Basra and its strategic hinterland was developed into the insane enterprise to capture Baghdad by *coup de main*, with very inadequate forces, and still more inadequate transport, we found ourselves involved in military operations of the most extensive and unprofitable character. These were completely successful with General Maude's occupation of Baghdad. After the Russian *debâcle* we found ourselves involved in a new front, which stretched from the Euphrates to the wildest part of Central Asia, producing military exploits of an almost epic character, but exercising little influence on the war. They were brought to an end by pressure not on extensive wings, but at the heart of Turkish Power in Palestine, where Lord Allenby scattered the Turks like chaff. But the aftermath of the war left us in an indefinite position in Mesopotamia, with indefinite frontiers. This enabled the Turks, if they were so disposed, to be troublesome through guerilla warfare in the Mosul Zone, and by stirring up the Kurds, who are the Ishmaelites of Asia Minor. The conclusion of the Treaty of Lausanne in 1923 brought temporary relief, but it did not settle the main issue, the frontier between Turkey and Irak. Under the Treaty it was provided that if the two parties could not agree to a boundary line delimitation should be left to The League of Nations. Negotiations were promptly opened at Constantinople, but it was immediately found that there could be no mutual agreement; the Turks demanded the whole of the Mosul vilayet, and the British delegates declared that Mosul and its hinterland were necessary to the existence of Irak. The issue therefore went to the League of Nations. That body despatched a neutral commission to study the position on the spot; this commission reported that the best settlement would be for the Mosul vilayet to be incorporated in Irak, if the British Government were prepared to prolong its mandate over that State for a period of twenty-five years. When the report of this commission came before the League in 1925 Britain gave the necessary guarantee, and the Council of The League unanimously allotted the Mosul vilayat to Irak. The Turkish delegates, who at first recognised the decisive authority of The League, then declared that they would not be bound by its decisions. So the matter rested at the end of the year, with Irak in occupation of the disputed up to the temporary frontier, which is known as The Brussels Line. After at first breathing nothing but armed resistance to acceptance of the award, the Turks afterward assumed a more conciliatory note, and alarmed, it may be, by the threat of Italian aggression accepted the frontier line demarcated by the League.

France and the Frontier.—If we touch for a few sentences on the position of France on the frontiers of India, it is not because they have any present day significance, but in order to complete this brief survey of the waxing and waning of external influences on Indian frontier policy. It is difficult to find any sound policy behind the efforts of France to obtain a coaling station at Maskat, in the Persian Gulf, and her long opposition to the steps necessary to extirpate the slave trade, and hold in check the immense traffic in arms which was equipping all the tribesmen on our North-West Frontier with rifles of precision and a large supply of ammunition. We can find no more definite purpose in it than a general pin-pricking policy, a desire to play the part of Russia, and perhaps a source of annoyance to Great Britain, which would form a useful lever for the exaction of considerable cessions in West Africa, particularly in the neighbourhood of Gambia, as the price of abstention. These embarrassments were slowly removed one by one after the conclusion

of the Anglo-French Entente. Far otherwise was it in the East. The consolidation of French authority in French Indo-China was the prelude to designs for the expansion of this authority at the expense of Siam and to find compensation there for the veiled British protectorate of Egypt. There had earlier been mutterings in Burma. We were established in Lower Burma in the thirties and in the eighties the foolish and tyrannical King Theebaw, in Upper Burma, became an impossible neighbour, and ambitious Frenchmen were not averse to fanning his opposition to the British. However, if any hopes were entertained of extending the Asiatic possessions of France in this direction, they were dissipated by the Second Burmese War and the firm establishment of British rule. Far otherwise was it on the confines of Siam. It was the fixed purpose of British policy to preserve Siam as a buffer state between Burma, then a regular Province of the Indian Empire, and French Indo-China. This policy was definitely challenged by French encroachments on Siam. Matters approached a crisis in 1894, and we were within measurable distance of a situation which might have ended in open war between the two States. But as in the case of Penjdeh, and later when Major Marchand marched across Africa to Fashoda, the imminence of hostilities made statesmen on both sides ask themselves what they might be going to fight about. They found there was nothing essential and an agreement was negotiated between the two Powers, which secured the independence and integrity of Siam. That agreement has been consolidated by wise and progressive rule in Siam itself, under its own independent sovereign, who is imbued with a strong friendship for Great Britain, whilst at the same time maintaining good relations with French neighbours.

The New Frontier Problem.—The whole purpose of this brief sketch has been to show that for three generations—most assuredly since the events leading to the Afghan War of 1838—the Indian frontier problem has never been a local problem. It has been dominated by external influences—in the main the long struggle between Great Britain and Russia, for a brief period the German ambition to build up a dominant position in the East through the revival of the land route, and to a much lesser extent by the ambitions of France and Turkey. All these external influences have disappeared. There is no such prospect of their revival as justified us in taking them into consideration in the measures which are forced on the Governments responsible. The Indian frontier question has therefore developed from an Imperial into a local question—a condition on which we must lay fast hold, because people are tenacious of old ideas, especially when they are nearly a century old, and no proper understanding of the present position is possible, unless our consideration of it is governed by this essential fact, that the frontier question is purely local. But whilst these world changes were taking place, others were in progress which powerfully influence the difficulties of the situation. The tribesman was always an opponent to be respected. Brave, hardy, fanatical, he has always been a first-class fighting man. Knowing every inch of the inhospitable country in which punitive operations must of necessity take place he has hung on our rearguards and given them an infinite of trouble. Even when armed with a jezail and when every cartridge had to be husbanded with jealous care, the tribesman was a respectable antagonist. Now the tribesmen are everywhere armed with magazine rifles, either imported through the Persian Gulf when gun-running was a thriving occupation, stolen from British magazines, or secured from Russian and Afghan sources. They have an abundant supply of ammunition. Considerable numbers of the fighting men have been trained in the ranks of the Indian Army, either as Regulars in the Pathan regiments, or else in the tribal militias. We found this to our cost in the events following the Afghan War of 1919. The Afghan regular army was of little account. The tribesmen who rose at the call of the jihad, especially in Waziristan, were of great account. They gave our troops the hardest fighting they have ever had on the Frontier; their marksmanship and fire discipline were described by experienced soldiers as admirable. The tribal militia, the keystone of the Curzon system, had for all practical purposes disappeared; what was to take its place?

Immediately following the Afghan War, the frontier positions were garrisoned by regular troops, but this was only a temporary measure. It may be said that the crux of the situation was in **Waziristan**. This sector of the Frontier has always been the most difficult of the whole, because of the intractable character of the people. Besides, possessing a bolt hole into Afghanistan they had in the past evaded effective punishment. In view of the complete disappearance of the external menace, and the consequent lapsing of any necessity to preserve open lines of communication which would enable us to go to the support of Afghanistan now formally recognised in the Treaty of 1921 as a completely independent state, there were many who urged the desirability of complete withdrawal, even to the line of the Indus. This extreme school gained little support. Our position in Quetta on the one side and Peshawar on the other is fully consolidated, and no good case can be made out for withdrawing from it. On the other hand, there was a strong case made out for leaving the tribesmen severely alone from the Gomal to the Kurram, and dealing with them if they emerged from their fastnesses. The military standpoint was that the Waziris are absolutely intractable; that it was unfair to impose on troops the frequent necessity of punitive operations in most arduous conditions; and that the only solution of the question was the occupation of dominant points in Waziristan, as far north as Laddha, and linking these posts with our military bases, and particular with the termini of the Indian frontier railways, by good motor roads.

This controversy has not ended yet; indeed one feels inclined to say that it never will end. It has resulted in a typically British compromise The present policy has beenaptly described as the "half-forward" policy. There has been no withdrawal in the ordinary sense of the term, but the limit of the Waziristan occupation have been fixed at Ramzak, not at Laddha. The network of consequential roads is being pushed forward.

The Indian rail-head, which for so long terminated at Jamrud, at the southern entrance to the Khyber Pass, has now been extended to Landi Kotal and the frontier between India and Afghanistan. The regular troops have been withdrawn, and their place taken by khassadars. The difference between the khassadars and the old tribal militia is material. The Militia were armed and equipped by the Indian military authorities; if they disappeared they took their arms and ammunition with them, and constituted a powerful reinforcement. The khassadars bring their own rifles with them, and therefore if they desert they do not constitute any reinforcement to those in arms against us. Many of these khassadars have already done good work in the punishment of tribal raids.

I.—THE PERSIAN GULF.

From what has gone before it will be seen that the keynote of this discussion of Indian frontier policy is that the external menace has disappeared, and that it is now a purely local question. No part of the frontier is more powerfully influenced by this consideration than the Persian Gulf. Our first appearance in the Gulf was in connection with the long struggle for supremacy with the Portuguese, the French and the Dutch, who had established trading stations there. With the capture and destruction of the great entrepot which the Portuguese had established at Ormuz, the supersession of the land by the sea route, and the appearance of anarchy in the interior the importance of the Gulf declined. The Indian Government remained there primarily to preserve the peace. This work it quietly and efficiently performed. Piracy was stamped out, the Trucial Chiefs, who occupy the Pirate Coast, were gradually brought into close relations with the Government, the vessels of the Royal Navy kept watch and ward, and our consuls regulated the external affairs of the Arab rulers on the Arab coast. In return for these services Great Britain claimed no selfish advantages. The waters of the Gulf were kept free to the navigation of the ships of all nations, and though Great Britain could have made any territorial acquisitions she pleased she retained possession of only the tiny station of Bassidu. Left to herself Great Britain desired no other policy, but for a quarter of a century the Gulf was involved in European affairs. France sought to acquire a coaling station at Jissa, near Maskat, and obstructed the efforts of the British Government to stamp out the slave trade and to check the immense traffic in arms which was equipping the tribes on our land frontier with weapons of precision and quantities of ammunition. All causes of difference were gradually removed by agreements following the Anglo-French Entente. Russia sent one of her finest cruisers to "show the flag" in the Gulf, and established consular posts where there were no interests of preserve. She was credited with the intention of occupying a warm water port, and in particular with casting covetous eyes on the most dreadful spot in the Gulf, Bunder Abbas. This menace declined after the signing of the Anglo-Russian Agreement and disappeared with the collapse of Russian power following the Revolution. Then Turkey, either acting for herself, or as the *avant courier* of Germany, under whose domination she had passed, began to stir. She threatened the Sheikh of Bahrein by the armed occupation of the peninsula of Al Katr, and moved troops to enforce her suzerainty over Koweit, the best port in the Persian Gulf and a possible terminus of the Baghdad Railway. Further to consolidate her interests, or to stake out a claim, Germany sent the heavily-subsidized ships of the Hamburg-America line to the Gulf, where they comported themselves as the instruments of Imperial policy rather than as inoffensive merchantmen. She also strove, through the agency of the firm of Wonkhaus, to acquire a territorial footing on the island of Shargah. These events stirred the British Government to an unusual activity in are waters of the Gulf.

Counter Measures.

The first effective steps to counter these influences were taken during the vigorous viceroyalty of Lord Curzon, who visited the Gulf during his early travels and incorporated a masterly survey of its features in his monumental work on Persia. He appointed the ablest men he could find to the head of affairs, established several new consulates, and was instrumental in improving the sea communications with the Gulf ports. The British Government also took alarm. They were fortified in their stand against foreign intrigue by the opinion of a writer of unchallenged authority. The American Naval writer, the late Admiral Mahan, placed on record his view that "Concession in the Persian Gulf, whether by formal arrangement (with other Powers) or by neglect of the local commercial interests which now underlie political and military control will imperil Great Britain's naval position in the Farther East, her political position in India, her commercial interests in both, and the Imperial tie between herself and Australasia." The Imperial standpoint, endorsed by both Parties in the State, was set out by Lord Lansdowne in

Khanikin
Hamadan
Baghdad
R. Tigris
R. Euphrates
Sultanabad
Kashan
PERSIA
Ispahan
Yezd
Ahwaz
Shat el Arab
Basra
Koweit
Shiraz
Kerman
Bushire
Bam
DASHT-I-LUT
Herat
AFGHANISTAN
Girishk
Helmand R.
Kandahar
Nasirabad
SEISTAN
Bandar-i-Khamal Khan
Robat
Nushki
Chagai
Kalat
BALUCHISTAN
Jalk
Bampur
Kuhak
Panjgur
MEKRAN
Turbat
PERSIAN GULF
Lingah
Bunder-Abbas
Bahrein
Rasal Kheima
Shargah
El Bidaa
Dibba
Jask
Charbar
Gwattar
Gwadar
Pasni
Karachi
PIRATE COAST
Sohar
Muscat
GULF OF OMAN
ARABIAN SEA
OMAN
Scale.
0 100 200 300 Miles.

words of great import—"We (*i.e.*, His Majesty's Government) should regard the establishment of a naval base or of a fortified port in the Persian Gulf by any other Power as a very grave menace to British interests, which we should certainly resist with all the means at our disposal." The negative measures following these declarations were followed by a constructive policy when the oil fields in the Bakhtiari country, with a great refinery, were developed by the Anglo-Persian Oil Company, in which the British Government has a large financial stake. But with the disappearance of these external forces on Gulf policy, as set out in the introduction to this section, the politics of the Persian Gulf receded in importance, until they are now more than they were before these external influences developed—a local question, mainly a question of police. They are therefore set out more briefly and those who desire a complete narrative are referred to the Indian Year Book for 1923, pp. 178-183.

Maskat.

Maskat, which is reached in about forty-eight hours from Karachi, is outside the Persian Gulf proper. It lies three hundred miles south of Cape Musandim, which is the real entrance to the Gulf, but its natural strength and historical prestige combine to make it inseparable from the politics of the Gulf, with which it has always been intimately associated.

Formerly Maskat was part of a domain which embraced Zanzibar, and the Islands of Kishm and Larak, with Bunder Abbas on the Persian shore. Zanzibar was separated from it by agreement, and the Persians succeeded in establishing their authority over the possessions on the eastern shore.

The relations between Britain and Maskat have been intimate for a century and more. It was under British auspices that the separation between Zanzibar and Maskat was effected, the Sheikh accepted a British subsidy in return for the suppression of the slave trade and in 1892 sealed his dependence upon us by concluding a treaty pledging himself not to cede any part of his territory without our consent.

The Pirate Coast.

Turning Cape Musandim and entering the Gulf Proper, we pass the Pirate Coast, controlled by the six Trucial Chiefs. The ill-name of this territory has now ceased to have any meaning, but in the early days it had a very real relation to the actual conditions. The pirates were the boldest of their kind, and they did not hesitate to attack on occasion, and not always without success, the Company's ships of war. Large expeditions were fitted out to break their power, with such success that since 1820 no considerable punitive measures have been necessary. The Trucial Chiefs are bound to Great Britain by a series of engagements, beginning with 1806 and ending with the perpetual treaty of 1853 by which they bound themselves to avoid all hostilities at sea, and the subsequent treaty of 1873 by which they undertook to prohibit altogether the traffic in slaves. The relations of the Trucial Chiefs are controlled by the British Resident at Bushire, who visits the Pirate Coast every year on a tour of inspection.

The commercial importance of the Pirate Coast is increasing through the rise of Debai. Formerly Lingah was the entrepot for this trade, but the exactions of the Belgian Customs officials in the employ of Persia drove this traffic from Lingah to Debai. The Trucial Chiefs are—Debai, Abu Thabee, Shargah Ajman, Um-al-Gawain and Ras-el-Kheyma.

Bahrein.

North of the Pirate Coast lies the little Archipelago which forms the chiefship of the Sheikh of Bahrein. Of this group of islands only those of Bahrein and Maharak are of any size, but their importance is out of all proportion to their extent. This is the great centre of the Gulf pearl fishery, which, in a good year, may be worth half a million pounds sterling. The anchorage is wretched, and at certain states of the tide ships have to lie four miles from the shore, which is not even approachable by boats, and passengers, mails and cargo have to be handed on the donkeys for which Bahrein is famous. But this notwithstanding the trade of the port is valued at over a million and a quarter sterling, and the customs revenue, which amounts to some eighty thousand pounds, makes the Sheikh the richest ruler in the Gulf.

In the neighbourhood of Bahrein is the vast burying ground which has hitherto baffled archæologists. The generally accepted theory is that it is a relic of the Phœnicians, who are known to have traded in these waters.

Political Agent: Lt. Col. C. C. J. Barrett, C.S.I., C.I.E.

Koweit.

In the north-west corner of the Gulf lies the port which has made more stir than any place of similar size in the world. The importance of Koweit lies solely in the fact that it is a possible Gulf terminus of the Baghdad Railway. This is no new discovery, for when the Euphrates Valley Railway was under discussion, General Chesney selected it under the alternative name of the Grane—so called from the resemblance of the formation of the Bay to a pair of horns—as the sea terminus of the line. Nowhere else would Koweit be called a good or a promising port. The Bay is 20 miles deep and 5 miles broad, but so shallow that heavy expense would have to be incurred to render it suitable for modern ocean-going steamers. It is sheltered from all but the westerly winds, and the clean thriving town is peopled by some 20,000 inhabitants, chiefly dependent on the sea, for the mariners of Koweit are noted for their boldness and hardihood.

Political Agent: Lt. Col. J. C. More, D.S.O.

Muhammerah.

On the opposite side of the entrance to the Shatt-el-Arab lie the territories of Sheikh Khazzal of Muhammerah. The town, favourably situated near the mouth of the Karun River, has grown in importance since the opening of the Karun River route to trade through the enterprise of Messrs. Lynch

Brothers. This route provides the shortest passage to Ispahan and the central tableland, and already competes with the older route by way of Bushire and Shiraz. This importance has grown since the Anglo-Persian Oil Company established refineries at Muhammerah for the oil which they win in the rich fields which they have tapped near Ahwaz. Its importance will be still further accentuated, if the scheme for a railway to Khorremabad by way of Dizful matures. A concession for a road by this route has long been held by a British Company.

Vice-Consul at Ahwaz: Captain R. P. Watts.

Basra.

In a sense Basra and Turkish Arabistan can hardly be said to come within the scope of the frontiers of India, yet they are so indissolubly associated with the politics of the Gulf that they must be considered in relation thereto. Basra is the present sea terminus of the Baghdad Railway. It stands on the Shatt-el-Arab, sixty miles from its mouth, favourably situated to receive the whole water-borne trade of the Tigris and Euphrates Rivers. The local traffic is valuable, for the richness of the date groves on either side of the Shat-tel-Arab is indescribable, there is a considerable entrepot traffic, whilst Basra is the port of entry for Baghdad and for the trade with Persia, which follows the caravan route *via* Kermanshah and Hamadan.

The political destinies of Basra are at present wrapped up with the destinies of the new Arab State which we have set up in Mesopotamia under King Feisal. When the war was over we found ourselves committed to immense, undefined and burdensome responsibilities in that land. The sound concepts which dictated the original expedition were dislocated in the foolish advance to Baghdad; then the great military enterprises necessitated by the fall of Kut-al-Amara carried our frontier north to Mosul and the mountains of Kurdistan, east to the Persian boundary, and west to the confines of Trans-Jordania. Amongst ardent Imperialists, there was undoubtedly the hope that this immense area would be in one way or another an integral part of the British Empire. The cold fit followed when the cost was measured, and the Arabs rose in a revolt which showed that any such domination could only be maintained by force of arms and that the cost would be prodigious. Under these circumstances King Feisal was imported from the Hedjaz and installed on the throne under the aegis of Great Britain. Still we were committed to the support of the new kingdom, and that most dangerous condition arose—responsibility without any real power unless King Feisal was to be a mere puppet, immense expenditure and indefinite military commitments. In these circumstances there was an insistent demand for withdrawal from the land. British policy moved slowly towards that end, but a definite step was taken in 1923. The Secretary of State for the Colonies announced this policy in a statement which is reproduced textually, for the purpose of reference. Addressing the House of Lords on May 3rd he said—

Your Lordships will remember that the Cabinet have been discussing this matter for some time, and decisions have now been taken. Sir Percy Cox has accordingly been authorised by His Majesty's Government to make an announcement at Baghdad, the terms of which I propose to read out to Your Lordships. This announcement was drawn up in consultation with King Feisal and his Government, and has their cordial assent. It is being published at Baghdad to-day.

The announcement is as follows :—

"It will be remembered that in the autumn of last year, after a lengthy exchange of views, it was decided between the Governments of His Britannic Majesty and His Majesty King Feisal that a Treaty of Alliance should be entered into between His Britannic Majesty and His Majesty the King of Iraq. This Treaty, which was signed on the 10th October, 1922, and the term of which was to be twenty years (subject to periodical revision at the desire of either party) provided for the establishment of an independent Constitutional Government in Iraq, enjoying a certain measure of advice and assistance from Great Britain of the nature and extent indicated in the text of the Treaty itself and of subsidiary Agreements which were to be made thereunder.

"Since then the Iraq Government has made great strides along the path of independent, and stable existence and has been able successfully to assume administrative responsibility, and both parties being equally anxious that the commitments and responsibilities of His Majesty's Government in respect of Iraq should be terminated as soon as possible, it is considered that the period of the Treaty in its present form can conveniently be shortened. In order to obviate the inconvenience of introducing amendments into the body of a Treaty already signed, it has been decided to bring about the necessary modifications by means of a protocol which, like the Treaty itself, will be subject to ratification by the Constituent Assembly.

"Accordingly a protocol has now been signed by the parties in the following terms :—

"It is understood between the High Contracting Parties that, notwithstanding the provisions of Article 18, the present Treaty is all terminate upon Iraq becoming a member of the League of Nations and in any case not later than four years from the ratification of peace with Turkey. Nothing in this protocol shall prevent a fresh agreement from being concluded with a view to regulate the subsequent relations between the High Contracting Parties; and negotiations for that object shall be entered into between them before the expiration of the above period."

It will be noticed that under this protocol the Treaty in its present form is to terminate on the entry of Iraq into the League of Nations or in four years, whichever may be earlier.

The position of Iraq as regards the League is that when the Treaty has been ratified His Britannic Majesty will be bound under Article 6 to use his good offices to secure the admission of Iraq to membership of the League of Nations as soon as possible. His Majesty's Government will be in a position to take this step on the fulfilment of the two following essential conditions, namely, the delimitation of the frontiers of Iraq, and the establishment on a stable government in accordance with the Organic Law

Suleimanie
Merivan
Kudjur
Kifri
Khosrabad
Samarra
OIL WELLS
Khanikin
Kasr-i-Shirin
To Teheran
Kizil Robat
Karind
Hamadan
Bakuba
Mendali
KIRMANSHAH
Firosabad
BAGDAD
P E R S I A
Burudjird
Bedrai
Pusht-i-Kuh
Azizie
KHOREMABAD
El Diwasa
Tigris
Hillah
Kut-el-Amarah
BAKTIARI
Shatt-el-Hai R.
Imam Ali Sherji
Abidiz
Disful
AMARA
Karun R.
Dufas
Euphrates
Shushter
Kale Sale
Nasiriyeh
OIL WELLS
Hauwise
Wais
KURNA
Ahwaz
Suk-el-Shuyukh
MEZRA
Melihan
Tembi
Ram-Hormus
New Channel
Shatt
PIPE LINE
BASRA
MOHAMMERAH
Shaiba
Zobeir
el-Arab
Diaisun
Abadan
Miles
0
100
FAO
PERSIAN GULF
N
MESOPOTAMIA
TURKEY

Under the Treaty of Lausanne between Turkey and the Powers, which was signed in 1923, it was agreed that the frontier between King Feisal's State and Turkey, the important frontier because the future of Mosul was in dispute, should be settled by the League of Nations, should Great Britain and Turkey be unable to come to agreement by direct negotiation. These direct negotiations were opened at Constantinople, but no agreement was reached, so the question was opened before the Council of the League in September 1924. Whilst the matter was under discussion complaint was made by Great Britain that Turkey had violated the provisional frontier drawn in the Treaty of Lausanne, and certain irregular hostilities were carried on in the disputed zone. This matter too was remitted to the League, and a further provisional boundary was drawn, which was accepted by both parties.

Here the matter remained until the autumn of 1925. In order to secure the material for a decision the League of Nations despatched a neutral commission to Mosul to investigate the situation. This commission produced a long and involved report, but one which led by devious paths to a common sense recommendation. It was that the first essential in the Mosul vilayet is stable government. The desires of the people were for incorporation in the State of Irak. If therefore the British Government was willing to extend its mandate over Irak for a further period of twenty-five years—a guarantee of stable government—then Mosul should be incorporated in Irak; if Britain was not willing, then Mosul should return to Turkey. When the matter came before the Council of the League Great Britain gave the necessary guarantee. The Turks thereupon challenged the whole competence of the Council to give an award under the terms of the Treaty of Lausanne. The issue was remitted to the Court of International Justice at The Hague which decided in favour of the competence of the Council. About this time there was published the report of a distinguished Esthonian General, General Laindoner, who had been despatched by the League to investigate allegations of brutality by the Turks in deporting Christians from their own zone, and this report was of the most damning character. Great Britain having given the necessary assurance, that she was prepared to extend her mandate over Irak for a further twenty-five years, thereupon the Council of the League allocated the whole of the area in dispute, right up to the temporary frontier—commonly called The Brussels Line—to Irak. The Turks refused to accept the award and withdrew from Geneva threatening force. Later wiser counsels and in 1926 Turkey accepted a frontier substantially as drawn by the League. A formal treaty was concluded between Great Britain and Irak extending the mandate for a further twenty-five years. The British Government express the hope that a shorter period will be sufficient to set Irak on its feet as an independent and stable State; but these hopes are not shared by any who knows the country. They are convinced that at least two generations must pass before Irak can stand alone.

A New Treaty.—A new Treaty regulating the relation of Iraq with Great Britain, the Mandatory Power, was negotiated in 1927, and signed towards the end of the year. The full text is not available, but a semi-official announcement on December 20th may be regarded as substantially authentic.

The Treaty declares that there shall be peace and friendship between His Britannic Majesty and His Majesty the King of Iraq. It states that "Provided the present rate of progress in Iraq is maintained and all goes well in the interval, His Britannic Majesty will support the candidature of Iraq for admission to the League of Nations in 1932." It stipulates that separate agreements superseding those of March 25, 1924, shall regulate the financial and military relations.

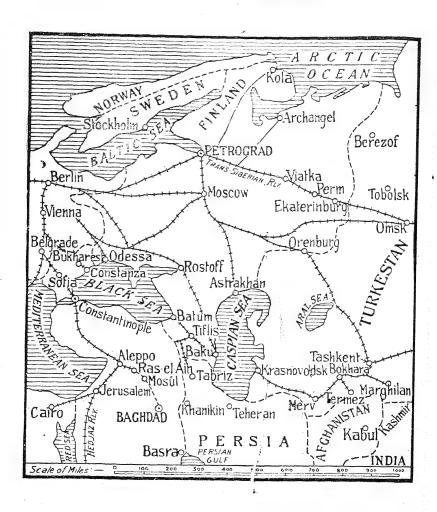
The King of Iraq undertakes to secure the execution of all international obligations which His Britannic Majesty has undertaken to see carried out in respect of Iraq. He also undertakes not to modify the existing provisions of Iraq's organic law so as adversely to affect the rights and interests of foreigners, and to constitute any difference in the rights before the law among Iraquis on the grounds of differences of race, religion, or language.

There shall be full and frank consultation between the high contracting parties in all matters of foreign policy which may affect their common interests. The King of Iraq undertakes, so soon as local conditions permit, to accede to all general international agreements already existing, or which may be concluded hereafter, with the approval of the League of Nations, in respect of the slave trade, the traffic in drugs, arms and munitions, the traffic in women and children, transit navigation, aviation, and communications, and also to execute the provisions of the Covenant of the League of Nations, the Treaty of Lausanne, the Anglo-French Boundary Convention, and the San Remo Oil Agreement in so far as they apply to Iraq.

There shall be no discrimination in matters concerning taxation, commerce, or navigation against nationals or companies of any State which is a member of the League of Nations, or of any State to which the King of Iraq has agreed by Treaty that the same rights should be ensured as if it were a member of the League.

Any difference that may arise between the high contracting parties shall be referred to the Permanent Court of International Justice provided for by Article Fourteen of the Covenant of the League. The Treaty shall be subjected to revision with the object of making all the modifications required by the circumstances when Iraq enters the League of Nations.

It is important to remember that there is a considerable difference between the vilayet of Basra and the other portions of King Feisal's State. Basra has for long been in the closest commercial contact with India, and is in many respects a commercial appanage of Bombay. Its people have not much in common with those of the North. They took no part in the Arab rising which followed the war, and they ask nothing better than to remain in close touch with India and through India with the British Government. If we are correct in the

Railway Position in the Middle East.

supposition that Basra is destined to be the great port of the Middle East, then its future under an Arab State, with no experience of administration in such conditions, is one of the greatest interest, which can hardly be regarded as settled by the policy underlying the declaration which is set out above.

The Persian Shore.

The Persian shore presents fewer points of permanent interest. The importance of Bushire is administrative rather than commercial. It is the headquarters of Persian authority; the residence of the British Resident, and the centre of many foreign consuls. It is also the main entrepot for the trade of Shiraz, and competes for that of Ispahnn. But the anchorage is wretched and dangerous, the road to Shiray passes over the notorious kotals which preclude the idea of rail connection, and if ever a railway to the central tableland is opened, the commercial value of Bushire will dwindle to insignificance. Further south lies Lingah, reputed to be the prettiest port on the Persian coast, but its trade is being diverted to Debai on the Pirate Coast. In the narrow channel which forms the entrance to the Gulf from the Arabian Sea is Bunder Abbas. Here we are at the key of the Gulf. Bunder Abbas is of some importance as the outlet for the trade of Kerman and Yezd. It is of still more importance as a possible naval base. To the west of the town between the Island of Kishm and the mainland, lie the Clarence Straits which narrow until they are less than three miles in width, and yet contain abundance of water. Here, according to sound naval opinion, there is the possibility of creating a naval base which would command the Gulf. The great obstacle is the climate, which is one of the worst in the world. On the opposite shore, under the shadow of Cape Musandim, lies another sheltered deep-water anchorage, Elphinstone's Inlet, where the climate conditions are equally vile. But between these two points there is the possibility of controlling the Gulf just as Gibraltar controls the Mediterranean. For many years Bunder Abbas loomed large in public discussions as the possible warm water port for which Russia was seeking. On the Mekran coast, there is the cable station of Jask, and the possible port of Chahbar.

Political Resident in the Persian Gulf—Lt.-Col. Sir L. B. H. Haworth. K.B.E.

Residency Surgeon at Bushire—Lt.-Col. A. N. Dickson, M.C.

Vice Consul at Bunder Abbas and Assistant to the Resident—G. A. Richardson, O.B.E.

II.—SEISTAN.

The concentration of public attention on the Persian Gulf was allowed to obscure the frontier importance of Seistan. Yet it was for many years a serious preoccupation with the Government of India. Seistan lies midway north and south between the point where the frontiers of Russia, Persia and Afghanistan meet at Zulfikar and that where the frontiers of Persia and of our Indian Empire meet on the open sea at Gwattur. It marches on its eastern border with Afghanistan and with Baluchistan, it commands the valley of the Helmand, and with it the road from Herat to Kandahar, and its immense resources as a wheat-producing region have been only partly developed under Persian misrule. It offers to an aggressive rival, an admirable strategic base for future military operations; it is also midway athwart the track of the shortest line which could be built to connect the Trans-Caspian Railway with the Indian Ocean, and if and when the line from Askabad to Meshed were built, the temptation to extend it through Seistan would be strong. Whilst the gaze of the British was concentrated on the North-West Frontier, and to possible lines of advance through Kandahar to Quetta, and through Kabul to Peshawar, there can be little doubt that Russian attention was directed to a more leisurely movement through Seistan, if the day came when she moved her armies against India.

Whether with this purpose or not, Russian intrigue was particularly active in Seistan in the early years of the century. Having Russified Khorassan, her agents moved into Seistan and through the agency of the Belgian Customs officials, "scientific missions" and an irritating plague cordon, sought to establish influence, and to stifle the British trade which was gradually being built up by way of Nushki. These efforts died down before the presence of the McMahon mission, which, in pursuance of Treaty rights, was demarcating the boundary between Persia and Afghanistan, with special reference to the distribution of the waters of the Helmand. They finally ceased with the conclusion of the Anglo-Russian Agreement. Since then the international importance of Seistan has waned.

The natural conditions which give to Seistan this strategic importance persist. Meantime British influence is being consolidated through the Seistan trade route. The distance from Quetta to the Seistan border at Killa Robat is 465 miles, most of it dead level, and it has now been provided with fortified posts, dak bungalows, wells, and all facilities for caravan traffic. The railway was pushed out from Spezand, on the Bolan Railway to Nushki, so as to provide a better starting point for the caravans than Quetta. This line was extended to the Persian Frontier, during the war as a military measure, but the traffic supports only two trains a week.

Frontier (Durand Line)
British Administrative Border
KABUL
AFGHANISTAN
Kabul R.
Mohmands
Jalalabad
DAKKA FT
KHYBER PS
PEIWAR PS
Ali Khel
FT PARACHINAR
PESHAWAR
Mangals
Kurram
Kohat
Zarmat
Khost
Thal
Matun
Spinwani
N.W. FRONTIER
Kaitu R.
BANNU
Tochi R.
Tochi
WAZIRISTAN
Ghilzais
Razmak
Mahsud Waziris
Jandola
Mianwali
Wana
Manzai
Sarwekai
Murtaza
R. Indus
Gumal R.
Dera Ismail Khan
Mandu Khels
SULAIMAN MTS
MULTAN
INDIA
Zhob R.
FT SANDEMAN
BALUCHISTAN
Miles.
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III.—PERSIA.

From causes which only need to be very briefly set out, the Persian question as affecting Indian frontier policy has receded until it is of no account. Reference is made in the introduction to this section to the fact that the conclusion of the Anglo-Russian Agreement left us a bitter legacy in Persia. That Agreement divided Persia into two zones of influence, and the Persians bitterly resented this apparent division of their kingdom between the two Powers, though no such end was in view. German agents, working cleverly on this feeling, established an influence which was not suspected, and when the war broke out they were able to raise the tribes in opposition to Great Britain, in the South, and after the fall of Kut-al-Amara, when a Turkish Division penetrated Western Persia, they exercised a strong influence in Teheran. With the defeat of Turkey and the Central Powers this influence disappeared, but at that time there was no authority in Persia besides that of the British Government, which had strong forces in the North-West and controlled the southern provinces through a force organised under British officers and called The South Persian Rifles. It was one of the first tasks of the British Government to regularise this position, and for this purpose an agreement was reached with the then Persian Government, the main features of which were :—

To respect Persian integrity ;

To supply experts for Persian administration ;

To supply officers and equipment for a Persian force for the maintenance of order ;

To provide a loan for these purposes ;

To co-operate with the Persian Government in railway construction and other forms of transport.

Both Governments agreed to the appointment of a joint committee to examine and revise the Customs tariff.

The second agreement defined the terms and conditions on which the loan was to be made to Persia. The loan was for £2,000,000 at 7 per cent. redeemable in 20 years. It was secured on the revenues and Customs' receipts assigned for the repayment of the 1911 loan and should these be insufficient the Persian Government was to make good the necessary sums from other sources.

The Present Position.— We have given the main points in the Anglo-Persian agreement, because few documents have been more misunderstood. Those who desire to study it in greater detail will find it set out in the Indian Year Book for 1921, page 138 *et seq.* It has been explained that most Persians construed it into a guarantee of protection against all external enemies. When the British troops in the north-west retired before the Bolsheviks, the Persians had no use for the Agreement and it soon became a dead instrument. It was finally rejected and the advisers who were to have assisted Persia under it withdrew.

A remark frequently heard amongst soldiers and politicians in India after the War was that Great Britain must take an active hand in Persia because she could not be a passive witness to chaos in that country. The view always taken in the Indian Year Book was that the internal affairs of Persia were her own concern ; if she preferred chaos to order that was her own look-out, but left alone she would hammer out some form of Government. That position has been justified. The Sirdar Sipah, or commander-in-chief, a rough but energetic soldier, gradually took charge of Persian affairs and established a thinly-veiled military dictatorship which made the Government feared and respected throughout the country for the first time since the assassination of Shah Nasr-ed-din. A body of capable Americans under Dr. Millspaugh restored order to the chaotic finances. These two forces operating in unison gave Persia the best government she had known for a generation. But the Sirdar Sipah chafed under the irregularities of his position, with a Shah spending his time in Europe and wasting the resources of the country. He moved to have his position regularised by the deposition of the absentee Shah and his own ascent of the throne. At first he was defeated by the opposition of the Mollahs, but in 1925 prevailed, when the Shah was formally deposed and the Sirdar Sipah chosen monarch in his place. The change was made without disturbance, and Persia entered on a period of peace and consolidation which has removed it from the disturbing forces in the post-war world. Throughout the year considerable progress was made with the reform of the administration, and many projects are afoot for the improvement of communications, which is the greatest need of the land, such as an air service to Teheran and railway construction. The least reassuring episode of the year was the departure of the American financial mission, which had done admirable work in the restoration of the finances. When their contract expired Dr. Millspaugh and his colleagues were offered a renewal of it on terms which they did not regard as satisfactory, especially in regard to the powers they were to exercise. They therefore withdrew from the country, and have been replaced by other foreign advisers.

Sir Percy Lorraine assumed office as British Minister at Teheran in December 1921.

H. B. M.'s Consul-General and Agent of the Government of India in Khorasan—Lt.-Col. H. V. Biscoe.

H. B. M.'s Consul in Seistan and Kain—C. P. Skrine.

Medical Officer and Vice-Consul—Major R. M. Vharegat.

IV.—THE PRESENT FRONTIER PROBLEM.

There yet remains a small part of British India where the King's writ does not run. Under what is called the Durand Agreement with the Amir of Afghanistan, the boundary between India and Afghanistan was settled, and it was delimited in 1903 except for a small section which was delimited after the Afghan War in 1919. But the Government of India have never occupied up to the border. Between the administered territory and the Durand line there lies a belt of territory of varying width extending from the Gomal Pass in the south, to Kashmir in the north; this is generically known as the Independent Territory. Its future is the keynote of the interminable discussions of frontier policy for nearly half a century.

This is a country of deep valleys and secluded glens, which nature has fenced in with almost inaccessible mountains. It is peopled with wild tribes of mysterious origin, in whom Afghan, Tartar, Turkoman, Persian, Indian, Arab and Jewish intermingle. They had lived their own lives for centuries, with little intercourse even amongst themselves, and as Sir Valentine Chirol truly said "the only bond that ever could unite them in common action was the bond of Islam." It is impossible to understand the Frontier problem unless two facts are steadily borne in mind. The strongest sentiment amongst these strange people is the desire to be left alone. They value their indenendence much more than their lives. The other factor is that the country does not suffice even in good years to maintain the population. They must find the means of subsistence outside, either in trade, by service in the Indian Army or in the Khassadars or else in the outlet which hill-men all the world over have utilised from time immemorial, the raiding of the wealthier and more peaceful population of the Plains.

Frontier Policy.

The policy of the Government of India toward the Independent Territory has ebbed and flowed in a remarkable degree. It has fluctuated between the Forward School, which would occupy the frontier up to the confines of Afghanistan, and the school of Masterly Inactivity, which would leave the tribesmen entirely to their own resources, punishing them only when they raided British territory. Behind both the policies lay the menace of a Russian invasion, and that coloured our frontier policy until the Anglo-Russian Agreement. This induced what was called Hit and Retire tactics. In the half century which ended in 1897 there were nearly a score of punitive expeditions, each one of which left behind a legacy of distrust, and which brought no permanent improvement in its train. The fruit of the suspicion thus engendered was seen in 1897. Then the whole Frontier, from the Malakand to the Gomal, was ablaze. The extent of this rising and the magnitude of the military measures which were taken to meet it compelled a consideration of the whole position. The broad outlines of the new policy were laid down in a despatch from the Secretary of State for India, which prescribed for the Government the "limitation of your interference with the tribes, so as to avoid the extension of administrative control over tribal territory." It fell to Lord Curzon to give effect to this policy. The main foundations of his action were to exercise over the tribes the political influence requisite to secure our imperial interests, to pay them subsidies for the performance of specific duties, but to respect their tribal independence and leave them, as far as possible, free to govern themselves according to their own traditions and to follow their own inherited habits of life without let or hindrance.

New Province.

As a first step Lord Curzon took the control of the tribes under the direct supervision of the Government of India. Up to this point they had been in charge of the Government of the Punjab, a province whose head is busied with many other concerns. Lord Curzon created in 1901, the North-West Frontier Province, and placed it in charge of a Chief Commissioner with an intimate frontier experience, directly subordinate to the Government of India. This was a revival of a scheme prepared by Lord Lytton in 1877, and often considered afterwards, but which had slipped for lack of driving power. Next Lord Curzon withdrew the regular troops so far as possible from the advanced posts, and placed these fortalices in charge of tribal levies, officered by a handful of British officers. The most successful of these was the Khyber Rifles, which steadfastly kept the peace of that historic Pass until 1919. At the same time the regular troops were cantoned in places whence they could quickly move to any danger point, and these bases were connected with the Indian Railway system. In pursuance of this policy frontier railways were run out to Dargai, and a narrow-gauge line, since converted to the broad-gauge, was constructed from Kushalgarh to Kohat at the entrance of the Kohat Pass, and to Thal at the mouth of the Kurram Valley. These railways were completed by lines to Tonk and Bannu. By this means the striking power of the regular forces was greatly increased. Nor was the policy of economic development neglected. The railways gave a powerful stimulus to trade, and the Lower Swat Canal converted fractious tribesmen into successful agriculturists. This policy of economic development is receiving a great development through the completion of the Upper Swat Canal (*q. v.* Irrigation). Now it is completed there are other works awaiting attention. For many years this policy was completely justified by results.

A New Policy.

It saved us from serious complications for nearly twenty years, although the position could never be said to be entirely satisfactory particularly in Waziristan, peopled by the most reckless raiders on the whole border-line with a bolt hole into Afghanistan when pressed from the British side. It endured throughout the war and did not break

down until the Amir of Afghanistan sought refuge from his internal troubles in a jehad against India. In this insane enterprise the Afghans placed less reliance in their regular troops, which have never offered more than a contemptible resistance to the British forces, than in the armed tribesmen. In this they were justified, for the most serious fighting was with the tribesmen. The tribal levies collapsed with almost universal swiftness. The Southern Waziristan Militia broke and there was serious trouble throughout the Zhob district. The Afridis, our most serious enemies in 1897, and the most powerful of the tribes on the North-West Frontier, remained fairly quiet throughout the actual hostilities with Afghanistan, but later, it was necessary to take measures against a leading malcontent and destroy his fort at Chora. But the Mahsuds and the Waziris broke into open hostilities. Their country lies within the belt bounded by the Durand Line and the Afghan frontier on the west, and by the districts of Bannu and Dehra Ismail Khan on the east. Amongst them the Afghan emissaries were particularly active and as they could put in the field some 30,000 warriors, 75 per cent. armed with modern weapons of precision, they constituted formidable adversaries. They refused to make peace even when the Afghans caved in. They rejected our terms and active measures were taken against them. The fighting was the most severe in the history of the Frontier. The Mahsuds fought with great tenacity. Their shooting was amazingly good; their tactics were admirable, for amongst their ranks were many men trained either in the Militia or in the Indian Army; and more than once they came within measurable distance of considerable success. They were assisted by the fact that the best trained troops in the Indian Army were still overseas and younger soldiers were opposed to them. But their very tenacity and bravery were their own undoing; their losses were the heaviest in the long history of the Borderland and when the Mahsuds made their complete submission in September 1921 they were more severely chastened than at any time during their career.

A New Chapter.—As the result of the Afghan War of 1919, Indian frontier policy was again thrown into the melting pot. There was much vague discussion of the position in the course of the months which followed the Afghan War and the troubles in Waziristan which succeeded it, but this discussion did not really come to a head until February-March 1922. The Budget then presented to the country revealed a serious financial position. It showed that despite serious increases in taxation, the country had suffered a series of deficits, which had been financed out of borrowings. Further heavy taxation was proposed in this Budget, but even then the equilibrium which the financial authorities regarded as of paramount importance was not attained. When the accounts were examined, it was seen that the heaviest charges on the exchequer were those under Military Expenses, and that there was an indefinitely large, and seemingly unending expenditure on Waziristan. This forced the Military, and allied with it the Frontier, expenditure to the front. In actual practice the discussion is really focussed on Waziristan. In essentials it is the aged controversy—shall we deal with this part of the Frontier on what is known as the Sandeman system, namely, by occupying commanding posts within the country itself, dominating the tribesmen but interfering little in their own affairs; or shall we revert to what was known as the close border system, as modified by Lord Curzon, of withdrawing our regular troops to strategic positions outside the tribal area, leaving the tribesmen, organised into militia, to keep the passes open, and punishing the tribesmen by expeditions when their raiding propensities become unbearable.

The Curzon Policy.—The Curzon policy, adopted in 1899, to clear up the aftermath of the serious and unsatisfactory Frontier rising in 1897, was a compromise between the "occupation" and the "close border" policies. It was based on the withdrawal of the regular troops so far as possible to cantonments in rear whilst the frontier posts, such as those in the Tochi at Wana and in the Khyber and Kurram were held by militia, recruited from amongst the tribesmen themselves. The cantonments for regular troops were linked so far as possible with the Indian railway system, so as to permit of rapid reinforcement. But it must be remembered that like all Frontier students, Lord Curzon did not regard this as the final policy. He wrote in the Memorandum formulating his ideas: "It is of course inevitable that in the passage of time the whole Waziri country up to the Durand line will come more and more under our control. No policy in the world can resist or greatly retard that consummation. My desire is to bring it about by gradual degrees and above all without the constant aid and presence of British troops." The Curzon policy, though it was not pursued with the steadfastness he would have followed if he had remained in control, gave us moderate—or rather it should be said bearable—frontier conditions until the Afghan War. It then broke down, because the tribal militia, on which it was based, could not withstand the wave of fanaticism, and other conditions set up by the Afghan invasion of 1919. The Khyber militia faded away; the Waziri militia either mutinied, as at Wana, or deserted. The pillar of the Curzon system fell in the military phrase of the hour, it could not stand the test of religious fanaticism or an Afghan War. The very word Militia became anathema.

The Policy.—The new policy adumbrated to meet these changed conditions was outlined by Lord Chelmsford, the then Viceroy, in a speech which he addressed to the Indian Legislatures. He said it had been decided to retain commanding posts in Waziristan; to open up the country by roads; to extend the main Indian railway system from its then terminus, Jamrud, through the Khyber to the frontier of Afghanistan, and to take over the duties of the Militia by regular troops. That immediate policy was soon modified so far as the garrisoning of these frontier positions by Regular troops was concerned. Such duties are immensely unpopular in the regular army, which is not organised and equipped for work of this character. Irregulars have always existed on the frontier, and as they had disappeared with the Militia, it was necessary to recreate them.

WAZIRISTAN.

Thal
To Kohat
Spinwam
Miram Shah
Idak
BANNU
Tochi R.
Datta Khel
WAZIRS
Razmak
Makin
PIR GHAL
Ladha
Piazha Raghza
Sara Ragha
MAHSUDS
Kotkai
Jandola
DARWESH KHEL
Wana
Manzai
Murtaza
Tank
Pezu
Lakki
Kalabagh
Mari
Daud Khel
Kundian
Khajuri Kach
Gumal
Kundar R.
BALUCHISTAN
Decauville Ry.
R. INDUS
DERA ISMAIL KHAN
Darya Khan
Scale of Miles
0 5 10 20 30
AFGHANISTAN
WAZIRISTAN
N.W. FRONTIER PROVINCE
(4438)

The new form of irregular was what have been called Khassadars and Scouts. The Khassadar is an extremely irregular irregular. He has no British officers and no uniform, except a distinguishing kind of *pagri*. In contradistinction to the old Militia, he finds his own rifle. As one informed observer remarked, the beauty of the system is that so long as the Khassadars, under their own headmen, secure the immunity of the caravans and perform their other police duties, they draw their pay and no questions are asked. If they desert in the day of trouble, they lose their pay but the Government loses no rifles, nor does it risk mutiny or the loss of British and Indian officers. But the application of this policy produced an acute controversy. It was one thing to say that commanding posts in Waziristan should be retained; it was another to decide what these posts should be. We must therefore consider the special problem of Waziristan.

V.—WAZIRISTAN.

We can now approach the real frontier question of the day, the future of Waziristan. What follows is drawn from an admirable article contributed to the January number of "The Journal of the United Service Institution of India," written by Lt.-Col. G. M. Routh, D.S.O.

Geographically Waziristan is a rough parallelogram averaging 60 miles from East to West and 160 from North to South. The western half consists of the Suleiman Range gradually rising up to the ridge from five to ten thousand feet high, which forms the water-shed between the Indus and the Helmund Rivers and corresponds with the Durand Line separating India from Afghanistan. This is the western boundary. On the east is the Indus. North is the watershed of the Kurram River running East and West about 30 miles north of Bannu separating Waziristan from the Kohat District. South is a zigzag political boundary from the Durand Line running between Wana and Fort Sandeman in Baluchistan with a turn southwards to the Indus.

The western half is a rugged and inhospitable medley of ridges and ravines straggled and confused in hopeless disarray. The more inhabited portions lie well up the slope at heights of four to six thousand feet. Here are our outposts of Wana and Ladha some 15 and 20 miles respectively from the Durand Line, in the centre of the grazing district, the latter within five miles of important villages of Kaniguram and Makin.

The submontane tracts from the hills to the Indus vary from the highly cultivated and irrigated land round Bannu to the sandy desert in the Marwat above Pezu.

Where irrigation or river water is obtainable cultivation is attempted under conditions which can hardly be encouraging. Other tracts like that between Pezu and Tank, usually pastoral, can only hope for an occasional crop after a lucky rainfall.

Inhabitants.—The inhabitants, unable to support existence on their meagre soil, make up the margin by armed robbery of their richer and more peaceful neighbours. The name originates according to tradition from one Wazir, two of whose grandsons were the actual founders of the race. Of the four main tribes Darweshkhel, Mahsuds, Dawars and Batanni, only the first two are true Wazirs. Their villages are separate though dotted about more or less indiscriminately, and inter-marriage is the exception—in fact all traditionally are in open strife, a circumstance which, until some bright political comet like the Afghan War of 1919 joined them together, as materially aided our dealings with them.

Unlike other parts of India, however, these wild people acknowledge little allegiance to maliks or headmen. No one except perhaps the Mulla Powindah till his death in 1913 could speak of any portion of them as his following.

Policy.—The policy of the British was at first one of non-interference with the tribes. Even now only part of the country is administered. Gradually it was found that more and more supervision became necessary to control raiding and this was attempted by expeditions to portions of the country with Regulars, followed by building posts and brick towers to be held by Militia. These posts were at first placed at the points where raiders usually debouched. The Political Officers, at first supported by Regulars, built up from 1904 onwards a force of some 3,000 Militia with British Officers at their disposal, who were backed up by the garrisons at Bannu and Dera Ismail Khan. In addition certain allowances were made to the tribes for good behaviour, prevention of raids and surrender of offenders when required; also for tribal escorts as necessary. Gradually, as occasion required, posts were occupied. Wana was occupied in 1895 at the request of the Wana Wazirs. Similarly the Tochi in 1896. In the comprehensive expedition of 1895-96 when this policy was put into effect, the British arms were shown in every remote valley in the vain hope of taming the Mahsuds. It was hoped the various posts would prove a pacifying influence and a rallying ground for Government supporters. From 1904 to 1919 they were held by Militia. Roads and communications were improved and tribal allowances augmented by sales of produce to the troops on a liberal scale.

A Programme.—Lt.-Col. Routh then outlined a possible policy for Waziristan. We give it textually, because we believe it substantially reflects military opinion in India:—

To the unprejudiced mind it appears more practical to grasp the nettle firmly and dominate the inhabited tracts. Why should not the road now being made to Ladha be continued 36 miles north to the Tochi road at Datta Khel and 29 miles south to Wana? Why should we not occupy the healthier portions of Waziristan rather than the foothills or Cis-Indus zones? The Razmak district round Makin 6,000 feet up is both healthy and fertile. The same applies to the Shawal valley laying behind Pir Gul, the national peak near Ladha rising to a height of 11,556 feet above the sea. The Wana plain, 5,000 feet up, 30 miles by 15, could with railways support an army corps; there is no doubt that a forward railway policy will help to solve the problem. A line has been surveyed from

Tank to Draban and thence up the valley to Fort Sandeman, so connecting with the Zhob and perhaps later to Wana. The Gumal Tangi from Murtaza to Khajuri Kach is the apparently obvious route, but would be prohibitively expensive in construction and require much tunnelling. Beyond Khajuri Kach *via* Tanai and Rogha Kot to Wana, some 23 miles, offers no difficulty. The old policy of the raiders working westwards and our retributive expeditions stretching their very temporary tentacles eastwards seems to suggest better lateral communications. The broad gauge at Kohat might without undue cost be extended to Thal and thence to Idak *via* Spinwam. From here till further extension proved desirable, a motor road through Razmak, Makin and Dwatoi to link up with that now surveyed to Ladha sounds possible to the looker on. Eventually such communications, road, rail, or both, could continue to Wana, Fort Sandeman and Quetta *via* Hindu Bagh, a strategic line offering great defensive possibilities substituting Razmak, which resembles Ootacamund, and healthy uplands for the deadly fever spots now occupied. The very fact of employing the tribesmen on these works with good pay and good engineers tends to pacify the country as well as providing healthy accessible hill stations in place of the proverbially comfortless cantonments which now exist in this part of the Frontier.

The Compromise.—The new policy, which has been called "the half forward policy," was announced in 1923. It was a compromise between the two extreme schools of thought. This involved the completion of various roads fit for mechanical transport within Waziristan and along the Derajat border; the holding of certain posts, Jandola and Razmak, by Regular troops until this road programme was completed; and thereafter the location of Scouts, who are *mutato nomine* militia, at certain points on the roads within Waziristan, assisted by *Khassadars*, or local levies, finding their own arms and led by their own leaders.

Results.—The official view of the working of the new system is strongly optimistic. It is that since May 1st, 1925, Waziristan is in the happy position of having no history. The Mahsuds have discovered that if the new military roads lead into their country, they also lead out of it, and many of them are taking the opportunity of seeing something of the neighbouring districts of Bannu and Dera Ismail Khan. The building of the roads enables many of the Mahsuds to acquire some money honestly, and now it is not an uncommon sight to see a Mahsud Malik, accompanied by as many of his friends as can find a place, driving in an old battered Ford towards Tank or Dera Ismail Khan. A promising sign is that this peaceful intercourse with the outer world is inducing in the Mahsuds a taste for the lighter episodes of social life. Of high promise is the opening of two primary schools at Karamma and Maidan. Along the whole frontier, between April 1925 and the end of February 1926 only 26 raids were made into British districts, as compared with that in the period immediately following 1919, when within three years 1,196 raids into British India were made.

VI.—AFGHANISTAN.

The relations of Afghanistan with the Indian Empire were for long dominated by one main consideration—the relation of Afghanistan to a Russian invasion of India. All other considerations were of secondary importance. For nearly three-quarters of a century the attitude of Great Britain toward successive Amirs has been dictated by this one factor. It was in order to prevent Afghanistan from coming under the influence of Russia that the first Afghan War of 1838 was fought—the most melancholy episode in Indian frontier history. It was because a Russian envoy was received at Kabul whilst the British representative was turned back at Ali Masjid that the Afghan War of 1878 was waged. After that the whole end of British policy toward Afghanistan was to build up a strong independent State, friendly to Britain, which would act as a buffer against Russia, and so to order our frontier policy that we should be in a position to move large forces up, if necessary, to support the Afghans in resisting aggression.

Gates to India.

A knowledge of the trans-frontier geography of India brought home to her administrators the conviction that there were only two main gates to India—through Afghanistan, the historic route to India, along which successive invasions have poured, and by way of Seistan. It was the purpose of British policy to close them, and of Russia to endeavour to keep them at any rate half open. To this end having pushed her trans-Persian railway to Samarkand. Russia thrust a military line from Merv to the Kushklinsky Post, where railway material is collected for its immediate prolongation to Herat. Later, she connected the trans-Siberian railway with the tran-Caucasian system, by the Orenburg-Tashkent line, thus bringing Central Asia into direct touch with her European magazines. Nor has Great Britain been idle. A great military station has been created at Quetta. This is connected with the Indian railway system by lines of railway which climb to the Quetta Plateau by the Bolan Pass and through the Chapper Rift, lines which rank amongst the most picturesque and daring in the world. From Quetta the line has been carried by the Khojak tunnel through the Khwaja Amran Range, until it leads out to the Afghan Border at New Chaman, where it opens on the route to Kandahar. The material is stocked at New Chaman which would enable the line to be carried to Kandahar in sixty days. In view of the same menace the whole of Baluchistan has been brought under British control. Quetta is now one of the great strategical positions of the world, and nothing has been left undone which modern military science can achieve to add to its natural strength. In the opinion of many military authorities it firmly closes the western gate to India, either by way of Kandahar, or the direct route through Seistan.

Further east the Indian railway system was carried to Jamrud later up the Khyber Pass to Landi Kotal. A first class military road sometimes double, sometimes treble, threads the Pass to our advanced post at Landi Kotal, and then descends until it meets the Afghan frontier at Landi Khana. Later, a commencement was made with the Loi Shilman Railway, which, starting from Peshawar, was designed to penetrate the Mullagori country and provide an alternative advance to the Khyber for the movement of British troops for the defence of Kabul. For unexplained reasons this line was suddenly stopped and is now thrust in the air. In this wise the two Powers prepared for the great conflict which was to be fought on the Kandahar-Ghazni-Kabul line.

Relations with India.

Between the advanced posts on either side stands the Kingdom of Afghanistan. The end of British policy has been to make it strong and friendly. In the first particular it has largely succeeded. When the late Abdurrahaman was invited to ascend the throne, as the only means of escape from the tangle of 1879, none realised his great qualities. Previously the Amir of Afghanistan had been the chief of a confederacy of clans. Abdurrahaman made himself master in his own kingdom. By means into which it is not well closely to enter; he beat down opposition until none dared lift a hand against him. Aided by a British subsidy of twelve lakhs of rupees a year, increased to eighteen by the Durand Agreement of 1893, and subsequently to over 20 lakhs, he established a strong standing army and set up arsenals under foreign supervision to furnish it with arms and ammunition. Step by step his position was regularised. The Anglo-Russian Boundary Commission,—which nearly precipitated war over the Penjdeh episode in 1885,—determined the northern boundaries. The Pamirs Agreement delimited the borders amid those snowy heights. The Durand Agreement settled the border on the British side, except for a small section to the west of the Khyber which remained a fruitful source of trouble between Afghanistan and ourselves until 1919, when the Afghan claims and action upon the undemarcated section led to war. That section was finally surveyed and the frontier determined shortly after the conclusion of peace with Afghanistan. Finally the McMahon award closed the old feud with Persia over the distribution of the waters of the Helmand in Seistan. It was estimated by competent authorities that about the time of Abdurrahaman's death, Afghanistan was in a position to place in the field, in the event of war, one hundred thousand well-armed regular and irregular troops, together with two hundred thousand tribal levies, and to leave fifty thousand regulars and irregulars and a hundred thousand levies to maintain order in Kabul and the provinces. But if Afghanistan were made strong, it was not made friendly. Abdurrahaman Khan distrusted British policy up to the day of his death. All that can be said is that he distrusted it less than he distrusted Russia, and if the occasion had arisen for him to make a choice, he would have opposed a Russian advance with all the force at his disposal, He closed his country absolutely against all foreigners, except those who were necessary for the supervision of his arsenals and factories. He refused to accept a British Resident, on the ground that he could not protect him, and British affairs were entrusted to an Indian agent, who was in a most equivocal position. At the same time he repeatedly pressed for the right to pass by the Government of India and to establish his own representative at the Court of St. James.

Afghanistan and the War.—These relations were markedly improved during the reign of His Majesty the Amir Habibullah Khan. It used to be one of the trite sayings of the Frontier that the system which Abdurrahman Khan had built up would perish with him, for none was capable of maintaining it. Habibullah Khan more than maintained it. He visited India soon after his accession and acquired a vivid knowledge of the power and resources of the Empire. He strengthened and consolidated his authority in Afghanistan itself. At the outset of the war he made a declaration of his complete neutrality. It is believed—a considerable reticence is preserved over our relations with Afghanistan—that he warned the Government of India that he might be forced into many equivocal acts, but they must trust him; certainly his reception of Turkish, Austrian and German "missions" at Kabul, at a time when British representatives were severely excluded, was open to grave misconstruction. But a fuller knowledge induced the belief that the Amir was in a position of no little difficulty. He had to compromise with the fanatical and anti-British elements amongst his own people, inflamed by the Turkish preaching of a jehad, or holy Islamic war. But he committed no act of hostility; as soon as it was safe to do so he turned the members of these missions out of the kingdom. At the end of the war his policy was completely justified; he had kept Afghanistan out of the war, he had adhered to the winning side; his authority in the kingdom and in Central Asia was at its zenith.

Murder of the Amir.—It is believed that if he had lived Habibullah Khan would have used this authority for a progressive policy in Afghanistan, by opening up communications and extending his engagements with India. He was courted by the representatives of Persia and the Central Asian States as the possible rallying centre of a Central Asian Islamic confederation. At this moment he was assassinated on the 20th February 1919. The circumstances surrounding his murder have never been fully explained; but there is strong ground for the belief that it was promoted by the reactionaries who had harassed him all his reign. These realised that with his vindication by the war their time of reckoning had come; they anticipated it by suborning one of his aides to murder him in his sleep. His brother, Nasrullah Khan, the nominee of the fanatical element, was proclaimed Amir at Jelalabad in his stead, but public opinion in Afghanistan revolted at the idea of the brother seizing power over the corpse of the murdered man. His sons, Hayat and Amanullah, were not disposed to waive their heritage. Amanullah was at

Kabul, controlling the treasury and the arsenal and supported by the Army. Nasrullah found it impossible to make head against him and withdrew. The new Amir, Amanullah, at once communicated his accession to the Government of India and proclaimed his desire to adhere to the traditional policy of friendship. But his difficulties at once commenced; he had to deal with the war party in Afghanistan; he was confronted with the dissatisfaction arising from the manner in which the murderers of Habibullah had been dealt with; the fanatical element was exasperated by the imprisonment of Nasrullah; and the Army was so incensed that it had to be removed from Kabul and given occupation to divert its thoughts. A further element of complexity was introduced by the political situation in India. The agitation against the Rowlatt Act was at its height. The disturbances in the Punjab and Gujarat had taken place. Afghan agents in India, of whom the most prominent was Ghulam Hyder Khan, the Afghan postmaster at Peshawar, flooded Afghanistan with exaggerated accounts of the Indian unrest. The result of all this was to convince the Amir that the real solution of his difficulties was to unite all the disturbing elements in a war with India. On the 25th April his troops were set in motion and simultaneously a stream of anti-British propaganda commenced to flow from Kabul and open intrigue was started with the Frontier tribes, on whom the Afghans placed their chief reliance.

Speedy Defeat.—The war caught the Army in India in the throes of demobilisation and with a large proportion of the seasoned troops on service abroad. Nevertheless the regular Afghan Army was rapidly dealt with. Strong British forces moved up the Khyber and seized Dacca. Jelalabad was repeatedly bombed from the air and also Kabul. Nothing but a shortage of mechanical transport prevented the British forces from seizing Jelalabad. In ten days the Afghans were severely defeated. On the 14th May they asked for an Armistice. With the usual Afghan spirit of haggling, they tried to water down the conditions of the armistice, but as they were met with an uncompromising emphasis of the situation they despatched representatives to a conference at Rawalpindi on the 26th July. On the 8th August a Treaty of Peace was signed which is set out in the Indian Year Book, 1923, pp. 196-197.

Post War Relations.—It will be seen that under this Treaty the way was paved for a fresh engagement six months afterwards. During the hot weather of 1920 there were prolonged discussions at Mussoorie between Afghan Representatives and British officials under Sir Henry Dobbs. These were private, but it is believed that a complete agreement was reached. Certainly after an interchange of Notes which revealed no major point of difference it was agreed that a British Mission should proceed to Kabul to arrange a definite treaty of peace. This Mission crossed the Border in January 1921 and entered Kabul where a peace treaty was signed.

The main points of the Treaty are set out in the Indian Year Book, 1923, pp. 197, 198-199.

Afghanistan after the War.—Since the War the relations between Afghanistan and Great Britain have been good and improving. There were painful episodes in 1923 when a murder gang from within Afghanistan committed raids in British India, murdering English people and kidnapping English women. In course of time this gang was broken up. His Majesty the King of Afghanistan has had troubles within his own borders which have made him glad of British help. The main object of his government has been to strengthen the resources of the country and to bring it into closer relation with modern methods of administration. But Afghanistan is an intensely conservative country and no changes are popular; especially violent was the opposition to a secular form of administration and education. The direct result was a formidable rebellion of Mangals and Zadrans in the Southern Provinces, and serious reverses to the regular troops sent against the rebels. At one time the position was serious, but the rebels were not sufficiently united to develop their successes, and with the aid of aeroplanes and other assistance afforded by the Government of India the insurrection was broken. Whilst this assistance was appreciated, the whole business gave a serious set-back to the reforms initiated by His Majesty; he had to withdraw almost the whole of his administrative code and to revert to the Mahomedan Law which was previously in force.

Bolshevik Penetration.—Taking a long view, a much more serious development of the policies of Afghanistan was the penetration of the Bolsheviks. These astute propagandists have converted the former Trans-Caspian States of Tsarist Russia into Soviet Republics, where the rule of the Bolsheviks is much more drastic and disruptive than was that of what was called the despotism of the Romanoffs. The object of this policy is gradually to sweep into the Soviet system the outlying provinces of Persia, of China and of Afghanistan. In Persia this policy has been foiled by the vigour of the Sipar Salah, Reza Khan, since declared Shah. In Chinese Turkestan it is pursued with qualified success. In Afghanistan it has made certain progress. The first step of the Bolsheviks was to extend the Soviet Republics of Tajikistan, Uzbekia and Turkmanistan so as to absorb all Northern Afghanistan. This has apparently been abandoned for the moment for a more gentle penetration Large subsidies, mostly delivered in kind, have been given to Afghanistan. Telegraph lines are being erected all over the country; roads are being constructed, large quantities of arms and ammunition are being supplied, whilst an air force with Russian pilots and mechanics has been created and is in process of development. In return the Bolsheviks have received important trading facilities. The whole purpose of this policy is ultimately to attack Great Britain in India through an absorbed Afghanistan.

It is very doubtful if the Amir and his advisers were deceived by these practices, and whether they did not pursue the simple plan of taking all they could get without the slightest intention of handing themselves over to the Bolsheviks. But it is easier to let the Bolshevik in than to get him out; friends of the Afghans were asking

themselves whether the Amir was not nourishing vipers in his bosom. Towards the end of 1925 and in the early part of 1926 there was a rude awakening. The Northern Frontier of the country has always been unsettled because of the shifting courses of the Oxus. In December Bolshevik forces captured with violence the Afghan post of Darkabad, killing one soldier; these events aroused great indignation at Kabul and were denounced by the Amir *coram publico*. There is no little evidence to show that though the form of government has changed in Russia the aims of Russian policy are the same. It used to be said that the test of Russian good faith under the Anglo-Russian Agreement would be the attitude of Petrograd towards the extension of the Orenberg-Tashkent railway to Termes. That line has been constructed by the Bolsheviks. The Afghans have had their eyes opened, with what results remains to be seen.

Russo-Afghan Treaty.—Outwardly the relations between the two States are friendly. In December 1926 the Afghan papers published the text of a new treaty concluded with Soviet Russia, which was signed on August 31st, but it provided that it should in no way interfere with the secret treaty signed in Moscow on February 28th, 1921. The principal clauses of this treaty, as disclosed in the Afghan papers, are as follows :—

Clause 1.—In the event of war or hostile action between one of the contracting parties and a third power or powers, the other contracting party will obeserve neutrality in respect of the first contracting party.

Clause 2.—Both the contracting parties agree to abstain from mutual aggression, the one against the other. Within their own dominions also they will do nothing which may cause political or military harm to the other party. The contracting parties particularly agree not to make alliances or political and miliary agreements with any one or more other powers against each other. Each will also abstain from joining any boycott or financial or economic blockade organized against the other party. Besides this in case the attitude of a third power or powers is hostile towards one of the contracting parties, the other contracting party will not help such hostile policy, and, further, will prohibit the execution of such policy and hostile actions and measures within its dominions.

Clause 3.—The high contracting parties acknowledge one another's Government as rightful and independent. They agree toabstain from all sorts of armed or unarmed interfereuce in one another's internal affairs. They will decidedly neither join nor help any one or more other powers which interfere in or against one of the contracting Government. None of the contracting parties will permit in its dominions the formation or existence of societies and the activities of individuals whose object is to gather armed force with a view to injuring the other's independence, or otherwise such activities will be checked. Similarly, neither of the contracting parties will allow armed forces, arms ammunition, or other war material, meant to be used against the other contracting party to pass through its dominions.

Clause 6.—This treaty will take effect from the date of its ratification, which should take place within three months of its signature. It will be valid for three years. After this period it will remain in force for another year provided neither of the parties has given notice six months before the date of its expiry that it should cease after that time.

On March 23rd there was also signed in Berlin a treaty between Germany and Afghanistan which amounted to no more than the establishment of diplomatic relations.

A British Minister is established in Kabul as well as the representatives of other European States. The representatives of Afghanistan are established in India and in London, and at some of the European capitals. The various subsidiary agreements under the Treaty have been carried into effect.

Afghanistan in 1928.

Our knowledge of recent events in Afghanistan is so doubtful and is based to so large an extent on frontier rumour, that what follows must be treated with every reserve. Authentic information is almost entirely lacking ; there has been no official statement ; and those who know the North-West Frontier of India, and the proneness of all classes to accept the maddest stories as truth, will severely discount the statements published in the newspapers.

The King's Tour.—In the closing months of 1927 His Majesty King Amanulla, accompanied by the Queen and a staff of officials, commenced a long tour to India and Europe. It is understood that this was one of the cherished ambitions of his father, King Habibullah who was assassinated in 1919. The project had to be suspended during the duration of the War, and save for a visit to India shortly after his assassination, the King did not leave his territories. King Amanulla was warmly welcomed in India and received a great popular greeting in Bombay both from his co-religionists and members of other communities, who forgot the invasion of India, in 1919. He then took ship to Europe, and was the guest of His Majesty King George V in London, and visited the principal European capitals. He made a State visit to Turkey, and returned to Afghanistan by way of Soviet Russia and Persia. A series of treaties with the government of the countries visited was anounced and the King returned to Kabul in the late summer of 1928, the tour having been unclouded by untoward incident and Afghanistan was peaceful during his long absence.

Reforming Zeal. It is understood that King Amanulla returned full of reforming zeal. He was much impressed by the political and social institutions of the western lands he visited, and in particular by the dramatic forcefulness with which Mustapha Kemal Pasha had driven Turkey along the path of "reform," or perhaps it would be more correct to say westernisation. In this he was encouraged by the . Queen, who was desirous of seeing the women of Afghanistan enjoy some of the freedom and opportunity won by and for the women of the West. Edict after edict was issued, changing the whole structure of

Afghan Society. New codes and taxes were imposed: it was proposed that women should emerge from their seclusion and doff the veil; the co-education of boys and girls was prescribed; in September Government officials were forbidden to practise polygamy; in October European dress was ordered for the people of Kabul; at the same time, according to fairly well substantiated authority, the pay of the regular troops fell into arrear.

With every appreciation of the spirit and direction of these changes, friends of His Majesty advised the King to moderate the pace. They reminded him that in 1924 far less drastic changes had brought serious trouble in their train. In May of that year the "Lame Mullah" raised the standard of rebellion amongst the Gilzai and Mangal clansmen of Khost. The ground for the revolt was the new criminal code, which was said to be in opposition to Mahomedan canon law embodied in the Sheriat and the appointment of civilian judges impinged on the privileges of the Mullahs. The rebellion was crushed, but not until after severe fighting; the lesson remained. Possibly also well-wishers suggested that what was possible in Turkey, after centuries of close contact with the West, and where the ground had been prepared by missionary effort and a long struggle for the emancipation of women, might be less easy in Afghanistan, where there had been no contact with the western world. Whatever the cause, news came through in the middle of December that there had been a tribal rising especially severe in the neighbourhood of Jelalabad, and that even Kabul was beset. The air has been thick with rumour ever since.

The Fog of Secrecy.—In the narrative of events to this point we are on fairly secure ground. The progress of events thereafter is a matter of sheer conjecture. A stream of rumour poured into Peshawar; a counter stream of denials which did not always tally with facts emitted from the Afghan consulates in India and in Europe. The first definite sign that things were not well occurred on December 17th; all communication with the Afghan wireless station at Kabul ceased and a veil fell between Afghanistan and the outer world. Evidently the authorities in India were not taken by surprise, for on the 18th an attempt was made to establish touch with Kabul by aeroplane, but the machine was shot down. Later attempts were more satisfactory, and the mechanism for a code of signals was dropped on the British Legation. Almost daily reconnaissances were made, and it is evident that the Government of India was kept well-informed of the progress of events. Air Force assistance was invoked from Irak, and large transport machines were brought from Baghdad. With the consent of the Afghan authorities the evacuation of the women and children was commenced on December 23rd, and the process continued without hitch. By the early part of January 1929 one hundred and thirty-two persons were brought to India, and it is reported that the Soviet emissaries were transported to Russian territory through the medium of their own aircraft.

As to the nature of the revolt, its origins and developments, we are still in the dark. It is understood that the first overt movement was made by the Shinwarri tribes, who live in the Jelalabad district and spread into the British zone north of the Khyber Pass. They took virtual possession of Jelalabad and a settlement with them, in which bags of gold are said to have played a prominent part, was declared before the middle of January. In the Kabul zone a notorious frontier budmash Bacha-i-Saqqa is reported to have taken to outlawry and to have defeated the Afghan Regular Troops, whose pay was in arrear and some of whom are said to have gone over to the rebels. Most of the Legations are outside the city walls, and the British Legation, which is specially remote was under fire, through apparently without any direct hostility to Britain. Every day the Afghan Consulates announced the complete defeat of the rebels; every day "news" of further fighting was reported. However, before January was half way through a trickle of caravan traffic began to arrive in Peshawar through the Khyber, announcing that this part of the country at any rate had attained a more peaceful state.

Reforms Withdrawn—Far more significant on its bearing on the situation was a telegram published on January 17th, reporting that the Kabul Newspaper "Amani" published a proclamation from the King withdrawing all the reforms. According to this statement the Afghan girls who were sent to Turkey for education, were recalled. Orders for the adoption of European dress and for the unveiling of women were cancelled. Girls' schools and women's associations were closed. Soldiers might become followers of Pirs without permission. Certificates of identity and conscription were withdrawn. Friday again became the weekly holiday, A Mejlis-i-Agan (Council of Notables) was formed, consisting of 50 Ulman Sirdars, Khans and officials to amend the laws in accordance with the Sheriat and to review the decisions of the newly constituted Mejlis-i-Vukkala (Council of Provincial representatives).

The proclamation was signed by prominent Ulmans, including the Chief, Qazi Mahomed Akbar and Hazmat Rahim of Shor Kazaud.

British Representatives—Lieut-Col. Sir Francis Henry Humphrys, K.B.E.,

VII.—TIBET.

Recent British policy in Tibet is really another phase in the long-drawn-out duel between Great Britain and Russia in Central Asia. The earliest efforts to establish communication with that country were not, of course, inspired by this apprehension. When in 1774 Warren Hastings despatched Bogle on a mission to the Tashi-Lama of Shigatse,—the spiritual equal

if not superior, of the Dalai Lama of Lhasa—his desire was to establish facilities for trade, to open up friendly relations with a Power which was giving us trouble on the frontier, and gradually to pave the way to a good understanding between the two countries. After Warren Hastings' departure from India the subject slept, and the last Englishman to visit Lhasa, until the Younghusband Expedition of 1904, was the unofficial Manning. In 1885, under the inspiration of Colman Macaulay, of the Bengal Civil Service, a further attempt was made to get into touch with the Tibetans, but it was abandoned in deference to the opposition of the Chinese, whose suzerainty over Tibet was recognised, and to whose views until the war with Japan, British statesmen were inclined to pay excessive deference. But the position on the Tibetan frontier continued to be most unsatisfactory. The Tibetans were aggressive and obstructive, and with a view to putting an end to an intolerable situation, a Convention was negotiated between Great Britain and China in 1890. This laid down the boundary between Sikkim and Tibet, it admitted a British protectorate over Sikkim, and paved the way for arrangements for the conduct of trade across the Sikkim-Tibet frontiers. These supplementary arrangements provided for the opening of a trade mart at Yatung, on the Tibetan side of the frontier, to which British subjects should have the right of free access, and where there should be no restrictions on trade. The agreement proved useless in practice, because the Tibetans refused to recognise it, and despite their established suzerainty, the Chinese Government were unable to secure respect for it.

Russian Intervention.

This was the position when in 1899 Lord Curzon, Viceroy of India, endeavoured to get into direct touch with the Tibetan authorities. Three letters which he addressed to the Dalai Lama were returned unopened, at a time when the Dalai Lama was in direct intercourse with the Tsar of Russia. His emissary was a Siberian Dorjieff, who had established a remarkable ascendancy in the counsels of the Dalai Lama. After a few years' residence at Lhasa Dorjieff went to Russia on a confidential mission in 1899. At the end of 1900 he returned to Russia at the head of a Tibetan mission, of which the head was officially described in Russia as "the senior Tsanite Khomba attached to the Dalai Lama of Tibet." This mission arrived at Odessa in October 1900, and was received in audience by the Tsar at Livadia. Dorjieff returned to Lhasa to report progress, and in 1901 was at St. Petersburg with a Tibetan mission, where as bearers of an autograph letter from the Dalai Lama they were received by the Tsar at Peterhoff. They were escorted home through Central Asia by a Russian force to which several Intelligence Officers were attached. At the time it was rumoured that Dorjieff had, on behalf of the Dalai Lama, concluded a treaty with Russia, which virtually placed Tibet under the protectorate of Russia. This rumour was afterwards officially contradicted by the Russian Government.

The Expedition of 1904.

In view of these conditions the Government of India, treating the idea of Chinese suzerainty over Tibet as a constitutional fiction, proposed in 1903, to despatch a mission, with an armed escort, to Lhasa to discuss the outstanding questions with the Tibetan authorities on the spot. To this the Home Government could not assent, but agreed, in conjunction with the Chinese Government, to a joint meeting at Khamba Jong, on the Tibetan side of the frontier. Sir Francis Younghusband was the British representative, but after months of delay it was ascertained that the Tibetans had no intention of committing themselves. It was therefore agreed that the mission, with a strong escort, should move to Gyantse. On the way the Tibetans developed marked hostility, and there was fighting at Tuna, and several sharp encounters in and around Gyantse. It was therefore decided that the mission should advance to Lhasa, and on August 3rd, 1904, Lhasa was reached. There Sir Francis Younghusband negotiated a convention by which the Tibetans agreed to respect the Chinese Convention of 1890; to open trade marts at Gyantse, Gartok and Yatung; to pay an indemnity of £500,000 (seventy-five lakhs of rupees); the British to remain in occupation of the Chumbi Valley until this indemnity was paid off at the rate of a lakh of rupees a year. In a separate instrument the Tibetans agreed that the British Trade Agent at Gyantse should have the right to proceed to Lhasa to discuss commercial questions, if necessary.

Home Government intervenes.

For reasons which were not apparent at the time, but which have since been made clearer, the Home Government were unable to accept the full terms of this agreement. The indemnity was reduced from seventy-five lakhs of rupees to twenty-five lakhs, to be paid off in three years, and the occupation of the Chumbi Valley was reduced to that period. The right to despatch the British Trade Agent to Lhasa was withdrawn. Two years later (June 1906) a Convention was concluded between Great Britain and China regulating the position in Tibet. Under this Convention Great Britain agreed neither to annex Tibetan territory, nor to interfere in the internal administration of Tibet. China undertook not to permit any other foreign State to interfere with the territory or internal administration of Tibet. Great Britain was empowered to lay down telegraph lines to connect the trade stations with India, and it was provided that the provisions of the Convention of 1890, and the Trade Regulations of 1893, remained in force. The Chinese Government paid the indemnity in three years and the Chumbi Valley was evacuated. The only direct result of the Mission was the opening of the three trade marts and the establishment of a British Trade Agent at Gyantse.

Chinese Action.

The sequel to the Anglo-Russian Agreement was dramatic, although it ought not to have been unexpected. On the approach of the Younghusband Mission the Dalai Lama fled to Urga, the sacred city of the Buddhists in Mongolia. He left the internal government of Tibet in confusion, and one of Sir Francis

Younghusband's great difficulties was to find Tibetan officials who would undertake the responsibility of signing the Treaty. Now the suzerainty of China over Tibet had been explicitly reaffirmed. It was asserted that she would be held responsible for the foreign relations of Tibet. In the past this suzerainty, having been a "constitutional action," it was inevitable that China should take steps to see that she had the power to make her will respected at Lhasa. To this end she proceeded to convert Tibet from a vassal state into a province of China. In 1908 Chao Erh-feng, Acting Viceroy in the neighbouring province of Szechuen, was appointed Resident in Tibet. He proceeded gradually to establish his authority, marching through eastern Tibet and treating the people with great severity. Meantime the Dalai Lama, finding his presence at Urga, the seat of another Buddhist Pontiff, irksome, had taken refuge in Si-ning. Thence he proceeded to Peking, where he arrived in 1908, was received by the Court, and despatched to resume his duties at Lhasa. Moving by leisured stages, he arrived there at Christmas, 1909. But it was soon apparent that the ideas of the Dalai Lama and of the Chinese Government had little in common. The Dalai Lama expected to resume the temporal and spiritual despotism which he had exercised prior to 1904. The Chinese intended to deprive him of all temporal power and preserve him as a spiritual pope. The Tibetans had already been exasperated by the pressure of the Chinese soldiery. The report that a strong Chinese force was moving on Lhasa so alarmed the Dalai Lama that he fled from Lhasa, and by the irony of fate sought a refuge in India. He was chased to the frontier by Chinese troops, and took up his abode in Darjeeling, whilst Chinese troops overran Tibet.

Later Stages.

The British Government, acting on the representations of the Government of India, made strong protests to China against this action. They pointed out that Great Britain, while disclaiming any desire to interfere with the internal administration of Tibet, could not be indifferent to disturbances in the peace of a country which was a neighbour, on intimate terms with other neighbouring States on our frontier, especially with Nepal, and pressed that an effective Tibetan Government be maintained. The attitude of the Chinese Government was that no more troops had been sent to Tibet than were necessary for the preservation of order, that China had no intention of converting Tibet into a province, but that being responsible for the good conduct of Tibet, she must be in a position to see that her wishes were respected by the Tibetans. Finally, the Chinese remarked that the Dalai Lama was such an impossible person that they had been compelled again to depose him. Here the matter might have rested, but for the revolution in China. That revolution broke out in Szechuen, and one of the first victims was Chao Erh-feng. Cut off from all support from China, surrounded by a hostile and infuriated populace, the Chinese troops in Tibet were in a hopeless case; they surrendered, and sought escape not through China, but through India, by way of Darjeeling and Calcutta. The Dalai Lama returned to Lhasa, and in 1913, in the House of Lords on July 28, Lord Morley stated the policy of the British Government in relation to these changes. He said the declaration of the President of the Chinese Republic saying that Tibet came within the sphere of Chinese internal administration; and that Tibet was to be regarded as on an equal footing with other provinces of China, was met by a very vigorous protest from the British Government. The Chinese Government subsequently accepted the principle that China is to have no right of active intervention in the internal administration of Tibet, and agreed to the constitution of a conference to discuss the relation of the three countries. This Convention met at Simla when Sir Henry McMahon, Foreign Secretary to the Government of India; Mr. Ivan Chen, representing China; and Mr. Long Chen Shatra, Prime Minister to the Dalai Lama, threshed out these issues. Whilst no official pronouncement has been made on the subject, it is understood that a Convention was initialled in June which recognised the complete autonomy of Tibet proper, with the right of China to maintain a Resident at Lhasa with a suitable guard. A semi-autonomous zone was to be constituted in Eastern Tibet, in which the Chinese position was to be relatively much stronger. But this Convention, it is understood, has not been ratified by the Chinese Government, owing to the difficulty of defining Outer and Inner Tibet, and in 1918 Tibet took the offensive and threw off the last vestiges of Chinese suzerainty. When the Chinese province of Szechuan went over to the South, the Central Government at Pekin was unable to finance the frontier forces or to withstand the Tibetan advance, which was directed from Lhasa and appeared to be ably managed. After the Tibetan army had occupied some towns on the confines of the Szechuan marshes, hostilities were suspended and an armistice was concluded.

From what has gone before, it will be seen that the importance which formerly attached to the political condition of Tibet was much less a local than an external question, and was influenced by our relations with Russia and China rather than with our relations with Tibet. Russia having relapsed into a state of considerable confusion, and China having relapsed into a state of absolute confusion these external forces have disappeared, and Tibet no longer looms on the Indian political horizon. The veil has been drawn afresh over Lhasa, and affairs in that country pursue an isolated course, with this considerable difference. The Dalai Lama is now on terms of the greatest cordiality with the Government of India. In 1920 he requested that a British officer should be sent to discuss with him the position in Central Asia brought about by the Revolution in Russia and the collapse of Government in China, and Mr. Bell, C. M. G., I. C. S., Political Officer in Sikkim, was deputed for this purpose. In 1922 telephonic communication between Lhasa and India was established.

British Trade Agent, Gyantse and Yatung.—Captain H. G. Rivett-Carnac.

VIII.—THE NORTH-EASTERN FRONTIER.

The position on the northern frontier has been considered as if the British line were contiguous with that of Tibet. This is not so. The real frontier States are Kashmir, Nepal, Sikkim and Bhutan. From Chitral to Gilgit, now the northernmost posts of the Indian Government, to Assam, with the exception of the small wedge between Kashmir and Nepal, where the British district of Kumaon is thrust right up to the confines of Tibet, for a distance of nearly fifteen hundred miles there is a narrow strip of native territory between British India and the true frontier. The first of these frontier States is **Kashmir.** The characteristics of this State are considered under Indian States (*q.v.*); it is almost the only important Native State in India with frontier responsibilities; and it worthily discharges them through the agency of its efficient Indian State troops—four regiments of infantry and two Mountain Batteries, composed mainly of the Rajput Dogras, who make excellent fighting material. One of the most important trade routes with Tibet passes through Kashmir—that through Ladak. Then we come to the long narrow strip of **Nepal.** This Gurkha State stands in special relation with the British Government. It is for all practical purposes independent, and the British resident at Khatmandu exercises no influence on the internal administration. The governing machine in Nepal is also peculiar. The Maharaj Dhiraj, who comes from the Sesodia Rajput clan, the bluest blood in India, takes no part in the administration. All power vests in the Prime Minister, who occupies a place equivalent to that of the Mayors of the Palace, or the Shoguns of Japan. The present Prime Minister, Sir Chandra Shamsher, has visited England, and has given conspicuous evidence of his attachment to the British Government. Nepal is the main Indian outpost against Tibet or against Chinese aggression through Tibet. The friction between the Chinese and the Nepalese used to be frequent; and in the eighteenth century the Chinese marched an army to the confines of Khatmandu—one of the most remarkable military achievements in the history of Asia? Under the firm rule of the present Prime Ministe Nepal has been largely free from internal disturbance, and has been raised to a strong bulwark of India. Nepal is the recruiting ground for the Gurkha Infantry, who form such a splendid part of the fighting arm of the Indian Empire. Beyond Nepal are the smaller States of **Bhutan** and **Sikkim**, whose rulers are Mongolian by extraction and Buddhists by religion. In view of Chinese aggressions in Tibet, the Government of India in 1910 strengthened their relations with Bhutan by increasing their subsidy from fifty thousand to a lakh of rupees a year, and taking a guarantee that Bhutan would be guided by them in its foreign relations. Afterwards China was officially notified that Great Britain would protect the rights and interests of these States. At the request of the Nepalese Government a British railway expert was deputed to visit the country and advise on the best means of improving communications with India. As the result of his report the Nepalese Government have decided to construct a light railway from Bhichhakhori to Raxaul. Great success has attended the efforts of the Nepalese Government to abolish slavery.

Assam and Burma.

We then come to the Assam border tribes—the Daflas, the Miris, the Abors and the Mishmis. Excepting the Abors none of these tribes have recently given trouble. The murder of Mr. Williamson and Dr. Gregorson by the Minyong Abors in 1911 made necessary an expedition to the Dihang valley of the Abor country on the N. E. frontier. A force of 2,500 and about 400 military police was employed from October 1911 to April 1912 in subduing the tribe. After two or three small actions the murderers were delivered up. The cost of the expedition was Rs. 21,60,000. At the same time friendly missions were sent to the Mishmi and Miri countries. Close contact with these forest-clad and leech-infested hills has not encouraged any desire to establish more intimate relations with them. The area occupied by the Nagasares runs northwards from Manipur. The Nagasares, a Tibeto-Burman people, devoted to the practice of head hunting, which is still vigorously prosecuted by the independent tribes. The Chin Hills is a tract of mountainous country to the south of Manipur. The corner of India from the Assam boundary to the northern boundary of the Shan States is for the most part included in the Myitkyina and Bhamo districts of Burma. Over the greater part of this area, a labyrinth of hills in the north, no direct administrative control is at present exercised. It is peopled by the Shans and the Kachins. Civilisation is said to be progressing and steps have been taken to prevent encroachments from the Chinese side. There is a considerable trade with China through Bhamo. On the Eastern frontier of Burma are the Shan States, with an area of fifty thousand square miles and a population of 1,300,000. These States are still administered by the Sawbwas or hereditary chiefs, subject to the guidance of Superintendents and Assistant Superintendents. The Northern Shan Railway to Lashio, opened in 1903, was meant to be a stage in the construction of a direct railway link with China, but this idea has been put aside, for it is seen that there can never be a trade which would justify the heavy expenditure. The Southern Shan States are being developed by railway connection. The five Karenni States lie on the frontier south of the Shan States. South of Karenni the frontier runs between Siam and the Tenasserim Division of Burma. The relations between the Indian Government and the progressive kingdom of Siam are excellent. A notable humanitarian development of recent years is the success of the measures to abolish slavery in the Hukawng Valley. In this remote place in the north-east of Burma a mild system of slavery existed, but in response to the initiative and pressure of British officers they were all freed by April 1926.

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Later Stages.

The British Government, acting on the representations of the Government of India, made strong protests to China against this action. They pointed out that Great Britain, while disclaiming any desire to interfere with the internal administration of Tibet, could not be indifferent to disturbances in the peace of a country which was a neighbour, on intimate terms with other neighbouring States on our frontier, especially with Nepal, and pressed that an effective Tibetan Government be maintained. The attitude of the Chinese Government was that no more troops had been sent to Tibet than were necessary for the preservation of order, that China had no intention of converting Tibet into a province, but that being responsible for the good conduct of Tibet, she must be in a position to see that her wishes were respected by the Tibetans. Finally, the Chinese remarked that the Dalai Lama was such an impossible person that they had been compelled again to depose him. Here the matter might have rested, but for the revolution in China. That revolution broke out in Szechuen, and one of the first victims was Chao Erh-feng. Cut off from all support from China, surrounded by a hostile and infuriated populace, the Chinese troops in Tibet were in a hopeless case; they surrendered, and sought escape not through China, but through India, by way of Darjeeling and Calcutta. The Dalai Lama returned to Lhasa, and in 1913, in the House of Lords on July 28, Lord Morley stated the policy of the British Government in relation to these changes. He said the declaration of the President of the Chinese Republic saying that Tibet came within the sphere of Chinese internal administration; and that Tibet was to be regarded as on an equal footing with other provinces of China, was met by a very vigorous protest from the British Government. The Chinese Government subsequently accepted the principle that China is to have no right of active intervention in the internal administration of Tibet, and agreed to the constitution of a conference to discuss the relation of the three countries. This Convention met at Simla when Sir Henry McMahon, Foreign Secretary to the Government of India; Mr. Ivan Chen, representing China; and Mr. Long Chen Shatra, Prime Minister to the Dalai Lama, threshed out these issues. Whilst no official pronouncement has been made on the subject, it is understood that a Convention was initialled in June which recognised the complete autonomy of Tibet proper, with the right of China to maintain a Resident at Lhasa with a suitable guard. A semi-autonomous zone was to be constituted in Eastern Tibet, in which the Chinese position was to be relatively much stronger. But this Convention, it is understood, has not been ratified by the Chinese Government, owing to the difficulty of defining Outer and Inner Tibet, and in 1918 Tibet took the offensive and threw off the last vestiges of Chinese suzerainty. When the Chinese province of Szechuan went over to the South, the Central Government at Pekin was unable to finance the frontier forces or to withstand the Tibetan advance, which was directed from Lhasa and appeared to be ably managed. After the Tibetan army had occupied some towns on the confines of the Szechuan marshes, hostilities were suspended and an armistice was concluded.

From what has gone before, it will be seen that the importance which formerly attached to the political condition of Tibet was much less a local than an external question, and was influenced by our relations with Russia and China rather than with our relations with Tibet. Russia having relapsed into a state of considerable confusion, and China having relapsed into a state of absolute confusion these external forces have disappeared, and Tibet no longer looms on the Indian political horizon. The veil has been drawn afresh over Lhasa, and affairs in that country pursue an isolated course, with this considerable difference. The Dalai Lama is now on terms of the greatest cordiality with the Government of India. In 1920 he requested that a British officer should be sent to discuss with him the position in Central Asia brought about by the Revolution in Russia and the collapse of Government in China, and Mr. Bell, C. M. G., I. C. S., Political Officer in Sikkim, was deputed for this purpose. In 1922 telephonic communication between Lhasa and India was established.

British Trade Agent, Gyantse and Yatung.—Captain H. G. Rivett-Carnac.

VIII.—THE NORTH-EASTERN FRONTIER.

The position on the northern frontier has been considered as if the British line were contiguous with that of Tibet. This is not so. The real frontier States are Kashmir, Nepal, Sikkim and Bhutan. From Chitral to Gilgit, now the northernmost posts of the Indian Government, to Assam, with the exception of the small wedge between Kashmir and Nepal, where the British district of Kumaon is thrust right up to the confines of Tibet, for a distance of nearly fifteen hundred miles there is a narrow strip of native territory between British India and the true frontier. The first of these frontier States is **Kashmir.** The characteristics of this State are considered under Indian States (*q.v.*); it is almost the only important Native State in India with frontier responsibilities and it worthily discharges them through the agency of its efficient Indian State troops—four regiments of infantry and two Mountain Batteries, composed mainly of the Rajput Dogras, who make excellent fighting material. One of the most important trade routes with Tibet passes through Kashmir—that through Ladak. Then we come to the long narrow strip of **Nepal.** This Gurkha State stands in special relation with the British Government. It is for all practical purposes independent, and the British resident at Khatmandu exercises no influence on the internal administration. The governing machine in Nepal is also peculiar. The Maharaj Dhiraj, who comes from the Sesodia Rajput clan, the bluest blood in India, takes no part in the administration. All power vests in the Prime Minister, who occupies a place equivalent to that of the Mayors of the Palace, or the Shoguns of Japan. The present Prime Minister, Sir Chandra Shamsher, has visited England, and has given conspicuous evidence of his attachment to the British Government. Nepal is the main Indian outpost against Tibet or against Chinese aggression through Tibet. The friction between the Chinese and the Nepalese used to be frequent; and in the eighteenth century the Chinese marched an army to the confines of Khatmandu—one of the most remarkable military achievements in the history of Asia. Under the firm rule of the present Prime Minister Nepal has been largely free from internal disturbance, and has been raised to a strong bulwark of India. Nepal is the recruiting ground for the Gurkha Infantry, who form such a splendid part of the fighting arm of the Indian Empire. Beyond Nepal are the smaller States of **Bhutan** and **Sikkim**, whose rulers are Mongolian by extraction and Buddhists by religion. In view of Chinese aggressions in Tibet, the Government of India in 1910 strengthened their relations with Bhutan by increasing their subsidy from fifty thousand to a lakh of rupees a year, and taking a guarantee that Bhutan would be guided by them in its foreign relations. Afterwards China was officially notified that Great Britain would protect the rights and interests of these States. At the request of the Nepalese Government a British railway expert was deputed to visit the country and advise on the best means of improving communications with India. As the result of his report the Nepalese Government have decided to construct a light railway from Bhikhnathori to Raxaul. Great success has attended the efforts of the Nepalese Government to abolish slavery.

Assam and Burma.

We then come to the Assam border tribes—the Daflas, the Miris, the Abors and the Mishmis. Excepting the Abors none of these tribes have recently given trouble. The murder of Mr. Williamson and Dr. Gregorson by the Minyong Abors in 1911 made necessary an expedition to the Dihang valley of the Abor country on the N. E. frontier. A force of 2,500 and about 400 military police was employed from October 1911 to April 1912 in subduing the tribe. After two or three small actions the murderers were delivered up. The cost of the expedition was Rs. 21,60,000. At the same time friendly missions were sent to the Mishmi and Miri countries. Close contact with these forest-clad and leech-infested hills has not encouraged any desire to establish more intimate relations with them. The area occupied by the Nagasares runs northwards from Manipur. The Nagasares, a Tibeto-Burman people, devoted to the practice of head hunting, which is still vigorously prosecuted by the independent tribes. The Chin Hills is a tract of mountainous country to the south of Manipur. The corner of India from the Assam boundary to the northern boundary of the Shan States is for the most part included in the Myitkyina and Bhamo districts of Burma. Over the greater part of this area, a labyrinth of hills in the north, no direct administrative control is at present exercised. It is peopled by the Shans and the Kachins. Civilisation is said to be progressing and steps have been taken to prevent encroachments from the Chinese side. There is a considerable trade with China through Bhamo. On the Eastern frontier of Burma are the Shan States, with an area of fifty thousand square miles and a population of 1,300,000. These States are still administered by the Sawbwas or hereditary chiefs, subject to the guidance of Superintendents and Assistant Superintendents. The Northern Shan Railway to Lashio, opened in 1903, was meant to be a stage in the construction of a direct railway link with China, but this idea has been put aside, for it is seen that there can never be a trade which would justify the heavy expenditure. The Southern Shan States are being developed by railway connection. The five Karenni States lie on the frontier south of the Shan States. South of Karenni the frontier runs between Siam and the Tenasserim Division of Burma. The relations between the Indian Government and the progressive kingdom of Siam are excellent. A notable humanitarian development of recent years is the success of the measures to abolish slavery in the Hukawng Valley. In this remote place in the north-east of Burma a mild system of slavery existed, but in response to the initiative and pressure of British officers they were all freed by April 1926.

Railways to India.

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Meanwhile, Russia was pushing her railways from various directions into the Central Asian territory running along the northern frontiers of Persia and Afghanistan to the borders of Chinese Turkestan. The construction of a Trans-Persian railway, connecting India, across Persia, with the Russian lines between the Black Sea and the Caspian Sea came to the forefront after the conclusion of the historic Anglo-Russian agreement regarding Persia.

The Germans pushed forward their Baghdad railway project with a calculating shrewdness arising from their estimate of the value it would possess in their grand aim to overthrow the British Empire. The outbreak of the great war and the success of the Germans in inveigling Turkey into it saw the final stages of the construction of the railway pressed forward with passionate energy. Thus, before the overthrow of the Turks and Germans in Asia Minor and of the Germans in France the railway was completed and in use from Scutari across Anatolia, over the Taurus Mountains to Aleppo and thence eastward across the Euphrates to a point between Nisibin and Mosul. The Germans had also by that time constructed a line to Baghdad at the eastern end of the route, northwards from Baghdad to a point a considerable distance beyond Samara.

The war compelled the British to undertake considerable railway development northward from Basra, the port at the mouth of the Shat-el-Arab, the broad stream in which the Tigris and Euphrates, after their junction, flow into the head of the Persian Gulf. The system consists of a metre-gauge line from Basra *via* Nasarieh, on the Euphrates, thence northwards to Baghdad, the line passing a considerable distance westward to Kut-l-Amara, of historic fame. From Baghdad the line runs eastward approximately to the foot of the pass through which the Persian road crosses the frontier of that country. A line branches off in the neighbourhood of Kifri in the direction of Mosul. A line also runs westward from Baghdad to Feluja, on the Euphrates. With the Turkish Nationalists in control of Anatolia any question of the completion of the through Baghdad Line is indefinitely delayed.

The Trans-Persian line to join the Russian Caucasian system and the Indian railways first assumed proportions of practical importance in the winter of 1911. Both the Russian and the Indian railway systems were by then well developed up to the point likely to be the termini of a Trans-Persian line. The Russian system reached Julfa, on the Russo-Persian frontier in the Caucasus. During the war this line has been carried thence southward into the region east and south-east of Lake Urumia. The Indian railway system, on the borderland of India and Persia, was similarly much extended and improved during the war. A new agreement which was negotiated between England and Persia specially provided for British assistance in the development of Persian natural resources and particularly for the extension and improvement of Persian roads suitable for motor traffic but the agreement came to naught.

There remains the possibility of linking the Russian and Indian railway system by way of Afghanistan. The suggestion has often been made in recent years that the Russian line from Merv to Herat, on the northern frontier of Afghanistan, should be linked to the Indian line which proceeds from Quetta to the Afghan border on Chaman. The distance between the railway heads is about 250 miles. But there have always for strategic reasons been strong military objections to the railway across Afghanistan and after the death of the late Amir Habibullah the Afghan Government flatly opposed any suggestion for carrying the Indian or Russian railway system within their borders. What the present Afghan Government think about the matter was not shown up to the time this article was written, but the strange situation in Central Asia and beyond the Indian North-West Frontier does not suggest the early removal of the strategic difficulties. The completion of a broad-gauge line extending the Indian railway system through the Khyber Pass to Landi Khana, at its western extremity, opens a prospect of further possible rail connections with Afghanistan.

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Gaza
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Pt. Said
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Sayed Qasim Khan	Consul-General	Delhi.
Muhammad Usman Khan	Consul	Bombay.
Mr. Bashir Ahmad Khan	Do.	Karachi.
Argentine Republic.		
Senor Don Alejandro del Carril (junior)	Consul	Calcutta.
*Mr. J. F. Barton (leave)	Vice-Consul	Do.
*Mr. C. C. Miller (Acting)	Do.	Do.
Austria.		
*Signor E. Stella	Consul	Bombay.
Belgium.		
Monsieur L. Genis	Consul-General	Calcutta.
Monsieur F. E. Moulin (on leave)	Do.	Bombay.
Mr. L. Valensa (Acting, on leave)	Do.	Do.
Mr. A. Als (Acting)	Do.	Do.
*Mr. J. J. Fleckhart	Consul	Karachi.
*Mr. F. E. L. Werke (on leave)	Do.	Madras.
*Mr. C. W. Foster (Acting)	Do.	Do.
*Mr. C. G. Wodehouse	Do.	Rangoon.
Bolivia.		
*Mr. Abani Mohan Tagore	Consul-General	Calcutta.
*Mr. J. Johnston	Consul	Rangoon
Brazil.		
Dr. Manoel Agostinho de Heredia	Consu	Bombay.
Senhor J. P. Dias	Do.	Calcutta
*Mr. H. V. Simmons	Vice-Consul	Do.
*Mr. V. E. Nazareth	Do.	Karachi.
Vacant	Do.	Bombay.
*Mr. C. H. Straker	Do.	Madras.
*Mr. A. E. Donaldson	Do.	Rangoon.
*Mr. C. F. Pyett	Commercial Agent	Do.
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Senor Marcos G. Huidobro. G. H.	Consul-General	Calcutta.
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*Mr. A. R. Leishman	Do.	Chittagong.
China.		
Mr. Ying Wing Chan	Consul	Rangoon.
Costa Rica.		
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Senor Don Enrique Molina Y. Eurequez	Do.	Calcutta.
Czechoslovak Republic.		
Dr. Otakar Benes	Consul-General	Bombay.
Vacant	Vice-Consul	Do.
Mr. G. S. Mahomed	Consular Agent	Do.

* Honorary.

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*Mr. A. L. B. Tucker (Acting)	Consul	Do.
*Mr. E. H. Danchell (on leave)	Do.	Bombay.
*Captain A. G. Robertson (Ag.)	Do.	Do.
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Vacant	Do.	Karachi.
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Ecuador.		
*Mr. E. G. Dixon, O.B.E. (on leave)	Consul	Calcutta.
*Mr. T. E. Cunningham (Ag.)	Do.	Do.
Finland.		
*Mr. C. H. A. R. Hardcastle (on leave)	Consul	Bombay.
*Mr. F. E. Hardcastle (Acting)	Do.	Do.
*Mr. M. Joakim	Do.	Rangoon.
France.		
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Monsieur P. L. U. Sudreau	Consul	Bombay.
*Monsieur M. Garreau	Commercial Agent	Calcutta.
Mr. E. L. Price	Consular Agent	Karachi.
*Mr. F. E. L. Worke (on leave)	Do	Madras.
*Mr. C. W. Foster (Acting)	Do.	Do.
Vacant	Do.	Chittagong.
Mr. W. T. Milne	Do.	Rangoon.
Vacant	Do.	Akyab.
Vacant	Do.	Tellicherry.
Germany.		
Baron Ruedt Von Collenberg-Bædigheim (on leave)	Consul-General	Calcutta.
Baron L. Von Plesson (Acting Consul-General)	Consul	Do.
Herr Karl Kapp	Do.	Bombay.
*Herr H. A. W. Huchting (on leave)	Do.	Rangoon.
Herr H. Gloystein (Ag.)	Do.	Do.
Dr. Otto Eberl	Vice-Consul	Calcutta.
Greece.		
*Mr. A. G. Georgiadi (Ag.)	Consul-General	Calcutta.
*Mr. J. Humphrey, O.B.E.	Consul	Karachi.
*Mr. F. A. Archdale (Ag.)	Do.	Do.
Guatemala.		
*Mr. H. Birkmyre	Consul	Calcutta.
Hungary.		
*Mr. Eugene Ludwig (on leave)	Consul	Madras.
*Mr. F. E. Hooper (Ag.)	Do.	Do.
Italy.		
Count Antonio Arrivabene	Consul-General	Calcutta.
Cav. Nobile Don Giuseppe Serpi	Do.	Bombay.
Vacant	Consul	Calcutta.
*Cav. E. Benasaglio	Vice-Consul	Do.
Signor Cav. A. Manzato (on leave)	Do.	Bombay.
*Mons. Mario Cremonino	Do.	Do.
Vacant	Consular Agent	Rangoon.
Vacant	Do.	Madras.
*Signor R. Stuparich (on leave)	Do.	Karachi.
*Mr. C. S. Anderson (Ag.)	Do.	Do.
Vacant	Do.	Akyab.

* Honorary.

Name.	Appointment.	Station.
Japan.		
Mr. Kuramatsu Murai	Consul-General	Calcutta.
Mr. Kenzo Ito	Vice-Consul	Do.
Mr. S. Kurihara	Consul	Bombay.
Mr. K. Naito	Do.	Rangoon.
Latvia.		
*Mr. J. H. Wilson	Consul	Madras.
Liberia.		
Vacant	Consul	Calcutta.
Mexico.		
Vacant	Consul	Calcutta.
Netherlands.		
Vacant	Consul-Genera	Calcutta.
Monsieur D. Kleyn Molekamp (Ag. Con. Genl.).	Consul	Do.
Monsieur J. G. Bendien (on leave)	Do.	Bombay.
Mr. J. A. Ammann (Ag.)	Do.	Do.
*Monsieur D. Van Wijngaarden (on leave)	Do.	Karachi.
*Mr. C. Van Amerengen (Ag.)	Do.	Do.
Mr. W. J. C. Turnbull	Do.	Madras.
*Mr. W. Massink (on leave)	Do.	Rangoon.
Mr. A. Verhage (Ag.)	Do.	Do.
*Mr. C. E. Van Aken (Ag.)	Vice-Consul	Calcutta.
Nicaragua.		
*Mr. C. H. A. R. Hardcastle (on leave)	Consul	Bombay.
Norway.		
Monsieur G. Løchen	Consul-General	Calcutta.
*Mr. F. E. Hardcastle	Consul	Bombay.
*Sir J. F. Simpson, Kt.	Do.	Madras.
*Mr. J. B. Glass	Do.	Rangoon.
*Mr. C. H. A. R. Hardcastle (on leave)	Vice-Consul	Bombay.
Mr. R. W. Johnston	Do.	Akyab.
*Mr. C. M. Penny	Do.	Bassein.
*Mr. W. S. Chapman	Do.	Moulmein.
*Mr. J. J. Flockhart	Do.	Karachi.
Panama.		
*Cav. E. Benasaglio	Consul	Calcutta.
Persia.		
Mirza Bagher Khan Azimi	Consul-General	Calcutta.
Mirza Jelaluddin Khan Keyhan	Consul	Bombay.
Vacant	Do.	Calcutta.
Vacant	Do.	Madras.
*Khan Bahadur Mirza Ali Akbar Shirazi	Do.	Rangoon.
*Mr. E. V. Richardson	Vice-Consul	Karachi.
Vacant	Do.	Moulmein.
Peru.		
Vacant	Consul-General	Calcutta.
Senor Don M. R. Iglerias	Consul	Do.
Mr. J. A. Robin (Temp. in charge)	Do.	Rangoon.

* Honorary.

Name.	Appointment.	Station.
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*Mr. G. C. Moses (on leave)	Consul	Calcutta.
Mr. B. M. V. Gasper (Ag.)	Do.	Do.
*Senhor A. M. DeSouza (on leave)	Do.	Rangoon.
Senhor T. M. V. da Silveira (Ag.)	Vice-Consul	Do.
*Senhor A. P. J. Fernandes	Do.	Bombay.
*D. J. T. Alfonso	Do.	Karachi.
Rev. Avelino De Souza Kila-Verda	Do.	Madras.
Salvador.		
*Mr. F. R. Martin	Consul	Calcutta.
Siam.		
*Mr. B. E. G. Eddis	Consul-General	Calcutta.
*Mr. G. L. Winterbotham (on leave)	Consul	Bombay.
*Mr. W. G. Lely (Ag.)	Do.	Do.
*Mr. F. H. Wroughton	Do.	Rangoon.
*Mr. W. R. H. Taylor	Do.	Moulmein.
Spain.		
Vacant	Consul	Bombay.
Dr. D. S. Fraser (Ag. Consul)	Vice-Consul	Do.
*Mr. M. Crezoux	Do.	Calcutta.
Mr. W. B. Ireland	Do.	Madras.
*Mr. W. Young	Do.	Karachi
*Mr. W. H. Child	Do.	Rangoon.
Sweden.		
Monsieur C. A. E. Siifwerhjelm	Consul-General	Calcutta.
*Mr. K. P. Warmington	Consul	Madras.
*Giacoma Zino Meli	Do.	Bombay.
*Mr. E. A. Pearson (on leave)	Do.	Karachi.
*Mr. G. H. Raschen (Ag.)	Do.	Do.
*Mr. A. M. Rogerson (on leave)	Do.	Rangoon.
*Mr. W. F. Sutherland (Ag.)	Do.	Do.
*Mr. T. H. Wheeler (on leave)	Vice-Consul	Calcutta.
Vacant	Do.	Moulmein.
Switzerland.		
Mons. E. J. Lieberherr	Consul-General	Bombay.
Mr. H. W. Hirs (Ag.)	Do.	Do.
*Monsieur M. M. Staub	Consul	Calcutta.
*Mr. E. Halter (Acting)	Do.	Madras.
United States of America.		
Mr. R. Fraser (Jr.)	Consul-General	Calcutta.
Mr. R. Y. Jarvis	Consul	Do.
Mr. W. B. Keblinger	Do.	Bombay.
Vacant	Do.	Do.
Mr. R. S. McNiece	Do.	Karachi.
Mr. A. R. Thomson	Do.	Madras
Mr. E. B. Montgomery	Do.	Do.
Mr. C. J. Pisar	Do.	Rangoon.
Mr. H. H. Dick	Do	Do.
Mr. A. S. Rogers	Vice-Consul	Bombay.
Mr. W. H. Beach	Do.	Do.
*Mr. W. H. Minor	Do.	Calcutta.
Mr. R. R. Willey	Do.	Do.
Mr. J. R. Robinson	Do.	Do.
Mr. E. S. Parker	Do.	Madras.
Vacant	Do.	Rangoon.
Dr. H. B. Osborn	Do.	Do.
Vacant	Consular Agent	Bassein.
Vacant	Do.	Moulmein.
Vacant	Do.	Akyab.
Uruguay.		
*Mr. J. F. Barton (on leave)	Consul	Calcutta.
*Mr. C. C. Miller (Ag.)	Do.	Do.
Venezuela.		
*Mr. L. de Bretton	Consul	Calcutta.

* Honorary.

The Army.

The great sepoy army of India originated in the small establishments of guards, known as peons, enrolled for the protection of the factories of the East India Company; but sepoys were first enlisted and disciplined by the French, who appeared in India in 1665. Before this detachments of soldiers were sent from England to Bombay, and as early as 1665 the first fortified position was occupied by the East India Company at Armagon, near Masulipatam. Madras was acquired in 1640, but in 1654 the garrison of Fort St. George consisted of only ten men. In 1661 Bombay was occupied by 400 soldiers, and in 1665 the number was only 285 of whom 93 were English and the rest French, Portuguese, and natives.

After the declaration of war with France in 1744 the forces were considerably increased, but this did not prevent the French capturing Madras in 1746. Following the French example, the English raised considerable sepoy forces and largely increased the military establishments. In 1748 Major Stringer Lawrence landed at Fort St. David to command the forces of the Company. The English foothold in India was then precarious and the French under Dupleix were contemplating fresh attacks. It became necessary for the English Company to form a larger military establishment. The new commandant at once set about the organisation and discipline of his small force, and the garrison was given a company formation. This was the beginning of the regular Indian Army of which Lawrence subsequently became Commander-in-Chief. In Madras the European companies were developed into the Madras Fusiliers; similar companies in Bengal and Bombay became the 1st Bengal and 1st Bombay Fusiliers. The native infantry were similarly organised by Lawrence and Clive. By degrees Royal Regiments were sent to India, the first being the 39th Foot, which arrived in 1754.

Struggle with the French.—From this time for a century or more the army in India was engaged in constant war. After a prolonged war with the French, whom Dupleix had by 1750 raised to the position of the leading power in India, the efforts of Stringer Lawrence, Clive, and Eyre Coote completed the downfall of their rivals, and the power of England was established by the battle of Plassey in Bengal; and at Wandewash in Southern India, where the French were finally defeated in 1761. A number of independent States, owning nominal allegiance to the Emperor at Delhi, had risen on the decline of the Mughal Empire, some ruled by Mahratta Princes and others by Musalman adventurers such as Hyder Ali of Mysore. A prolonged struggle ensued with the latter and his son and successor Tipu Sultan, which ended only with the defeat and death of Tipu and the capture of Seringapatam in 1799.

Reorganisation of 1796.—In 1796 the native armies, which had been organised on the Presidency system, were reorganised. The European troops were 13,000 strong and the natives numbered some 67,000, the infantry being generally formed into 75 regiments of two battalions each. In Bengal, regiments were formed by linking existing battalions of ten companies each with large establishments of English officers. The Madras and Bombay armies were at the same time reorganised on similar lines, and cavalry and artillery companies were raised.

In 1798, the Marquis Wellesley arrived as Governor-General, firmly imbued with the necessity of destroying the last vestiges of French influence. In pursuance of this policy he reduced Mysore, where Tipu was intriguing with the French, and then turned his attention to the Mahratta States, in which Sindhia had established power over the Mughal Emperor at Delhi by means of a large regular-army officered by Europeans under the French adventurer Perron. In campaigns against Sindhia in Hindustan by a British Army under General Lake, and in the Deccan against that prince and the Raja of Berar by an army under General Wellesley, afterwards Duke of Wellington, the power of these Chiefs was broken in the battles of Laswari and Assaye. French influence was finally destroyed, and the Mughal Emperor was released from the domination of the Mahrattas. Subsequently Holkar also was reduced, and British power established on a firm footing.

Mutiny at Vellore.—The Indian Army had been from time to time subject to incidents of mutiny which were the precursors of the great cataclysm of 1857. The most serious of these outbreaks occurred at the fort of Vellore in 1806 when the native troops suddenly broke out and killed the majority of the European officers and soldiers quartered in the fort, while the striped flag of the Sultan of Mysore, whose sons were confined there, was raised upon the ramparts. The mutiny was suppressed by Colonel Gillespie, who galloped over from Arcot at the head of the 19th Light Dragoons, blew in the gate of the fort, and destroyed the mutineers. This retribution put a stop to any further outbreaks in the army.

Overseas Expeditions.—Several important overseas expeditions were undertaken in the early part of the nineteenth century. Bourbon was taken from the French; Ceylon and the Spice Islands were wrested from the Dutch, and Java was conquered in 1811 by a force largely composed of Bengal troops which had volunteered for this service.

In 1814, the Nepal War took place in which the brave Gillespie, who had distinguished himself in Java, was killed when leading the assault on the fort of Kalunga. The Gurkhas were overcome in this war after offering a stout resistance.

In 1817, hostilities again broke out with the Mahrattas, who rose against the British during the progress of operations against the Pindaris. Practically the whole army took the field and all India was turned into a vast camp. The

Mahratta Chiefs of Poona, Nagpur, and Indore rose in succession, and were beaten respectively at Kirkee, Sitabaldi, and Mehidpur. This was the last war in Southern India. The tide of war rolled to the north never to return. In the Punjab, to which our frontier now extended, our army came into touch with the great military community of the Sikhs.

In 1824, the armies were reorganised, the double-battalion regiments being separated, and the battalions numbered according to the dates they were raised. The Bengal Army was organised in three brigades of horse artillery, five battalions of foot artillery, two regiments of European and 68 of native infantry, 5 regiments of regular and 8 of irregular cavalry. The Madras and Bombay armies were constituted on similar lines, though of lesser strength.

First Afghan War and Sikh Wars.—In 1839, a British Army advanced into Afghanistan and occupied Cabul. There followed the murder of the British Envoys and the disastrous retreat in which the army perished. This disaster was in some measures retrieved by subsequent operations, but it had far-reaching effects on British prestige. The people of the Punjab had witnessed these unfortunate operations, they had seen the lost legions which never returned, and although they saw also the avenging armies they no longer regarded them with their former eyes. Sikh aggression led to hostilities in 1845-46, when a large portion of the Bengal Army took the field under Sir Hugh Gough. The Sikhs were defeated after stubborn fights at Mudki and Ferozeshahr, the opening battles, but did not surrender until they had been overthrown at the battles of Aliwal and Sobraon. Two years later an outbreak at Multan caused the Second Sikh War when, after an indecisive action at Chilianwala, our brave enemies were finally overcome at Gujerat, and the Punjab was annexed. Other campaigns of this period were the conquest of Sind by Sir Charles Napier, and the Second Burmese War, the first having taken place in 1824.

The conquest of the Punjab extended over the frontier to the country inhabited by those turbulent tribes which have given so much trouble during the past sixty years while they have furnished many soldiers to our army. To keep order on this border the Punjab Frontier Force was established, and was constantly engaged in small expeditions which, while they involved little bloodshed, kept the force employed and involved much arduous work.

The Indian Mutiny.—On the eve of the mutiny in 1857 there were in the Bengal Army 21,000 British and 137,000 native troops; in the Madras Army 8,000 British and 49,000 native troops; and in Bombay 9,000 British and 45,000 native troops. The proportion of native to British was therefore too large for safety. The causes of the mutiny were many and various. Among these were the annexation policy of Lord Dalhousie, especially that of Oudh from which the greater part of the Bengal Army was drawn; interference with the privileges of the sepoy with respect to certain allowances; and lack of power on the part of commanding officers either to punish or reward. The final spark which fired the revolt was the introduction of a new cartridge. The muskets of those days were supplied with a cartridge in which the powder was enclosed in a paper cover, which had to be bitten off to expose the powder to ignition. In 1857 a new cartridge was introduced with paper of a glazed texture which it was currently reported was greased with the fat of swine and oxen, and therefore unclean alike for Muhammadans and Hindus. This was interpreted as an attempt to destroy the caste and the religion of the sepoys. Skilful agitators exploited this grievance, which was not without foundation, and added reports that flour was mixed with bone-dust and sugar refined with the blood of oxen.

Disaffection culminated in mutiny at Berhampur and in an outbreak at Barrackpore where sepoy Mangal Pande attacked a European officer. The next most serious manifestation was the refusal of men of the 3rd Bengal Cavalry at Meerut to take the obnoxious cartridge. These men were tried and sentenced to long terms of imprisonment, their fetters being rivetted on parade on the 9th May. Next day the troops in Meerut rose, and, aided by the mob, burned the houses of the Europeans and murdered many. The troops then went off to Delhi. Unfortunately there was in Meerut no senior officer capable of dealing with the situation. The European troops in the place remained inactive, and the mutineers were allowed to depart unmolested to spread the flames of rebellion.

Delhi is the historic capital of India. On its time worn walls brood the prestige of a thousand years of Empire. It contained a great magazine of ammunition. Yet Delhi was held only by a few native battalions, who joined the mutineers. The Europeans who did not succeed in escaping were massacred and the Delhi Emperor was proclaimed supreme in India. The capital constituted a nucleus to which the troops who mutinied in many places flocked to the standard of the Mughal. An army was assembled for the recovery of Delhi but the city was not captured until the middle of September. In the meantime mutiny had spread. The massacres of Cawnpore and Jhansi took place, and Lucknow was besieged until its relief on the 27th September. The rebellion spread throughout Central India and the territory that now forms the Central Provinces, which were not recovered until Sir Hugh Rose's operations in 1858 ended in the defeat of the Rani of Jhansi.

Minor Campaigns.—During the period until 1879, when the Second Afghan War began, there were many minor campaigns including the China War of 1860, the Ambeyla Campaign, and the Abyssinian War. Then followed the Afghan War in which the leading figure was Lord Roberts. There were expeditions to Egypt and China, and Frontier Campaigns of which the most important was the Tirah Campaign of 1897. There were also the prolonged operations which led up to or ensued upon the annexation of Burma, several campaigns in Africa, and the expeditions to Lhasa. But until 1914, since the Afghan War, the army of India, except that portion of the British garrison which was sent to South Africa in 1899, had little severe fighting, although engaged in many arduous enterprises.

Reorganisation after the Mutiny.—In 1857 the East India Company ceased to exist and their army was taken over by the Crown. At this time the army was organized into three armies, *viz*: Bengal, Bombay and Madras, the total strength being 65,000 British and 140,000 Indian troops.

Several minor re-organizations took place during the following years, such as the linking of three Regiments together and the raising of Class Regiments and Companies. In 1895 the first large reorganization took place. This was the abolition of the three Armies and the introduction of the command system. Four Commands were formed, *viz*: Punjab, Bengal, Madras and Bombay.

Lord Kitchener's Scheme.—This system lasted until 1904 when under Lord Kitchener's re-organization the Madras Command was abolished and the Army divided into three Commands—the Northern, Eastern and Western, corresponding to the Punjab, Bombay and Bengal Commands.

In 1907, Lord Kitchener considered that consequent on the delegation of administrative powers to Divisional Commanders, retention of such powers by Lieutenant-Generals of Commands led to delay in the despatch of business. The Command system was therefore abolished and India was divided into two Armies—the Northern and Southern—each under a General Officer who was responsible for the command, inspection and training of the troops but was given no administrative responsibilities.

Early in the War both Army Commanders took the field and were not replaced until 1916 and 1917 when both had practically the same functions as their predecessors. It was now realised that administration was being unduly centralised at Army Headquarters and the machinery was becoming clogged with unnecessary details. To secure efficiency at A. H. Q., therefore, a certain measure of decentralisation was carried out in 1918. With the alteration of the designation "Army" to "Command" at this time, a considerable increase was made in the administrative staffs of the two Commands and the General Officers Commanding were given powers to deal with all administrative questions other than those dealing with matters of policy, new principles or war.

The commands were increased to four in 1920, each under a General Officer Commanding-in-Chief.

Present System of Administration

The essential features of the Army, as constructed on its present basis, will be found in "The Army in India and its Evolution," a publication issued with the authority of the Government of India in 1924.

The Secretary of State, as one of His Majesty's ministers, has a special responsibility and authority in regard to the military administration in India.

The Secretary of State's principal adviser on Indian military affairs is the Secretary in the Military Department of the India Office. The post is filled by an officer of the Indian Army of high rank with recent Indian experience. The appointment is at present held by Field Marshal Sir Claud Jacob, G.C.B., K.C.S.I., K.C.M.G., who was formerly General Officer Commanding-in-Chief of the Northern Command and officiated as Commander-in-Chief from April 1925 to August 1925. The Military Secretary is assisted by one first grade staff officer, selected from the Indian Army. In order that he may keep in touch with the current Indian affairs, the Military Secretary is expected to visit India during the tenure of his office. In addition, by a practice which has obtained for many years, a retired Indian Army officer of high rank has a seat upon the Secretary of State's Council.

The superintendence, direction and control of the civil and military government of India are vested in the Governor-General in Council, who is required to pay due obedience to all such orders as he may receive from the Secretary of State. The Viceroy's Executive Council exercise in respect of Army administration the same authority and functions as they exercise in respect of other departments of the Government; in the first phase of the representative institutions conferred upon India by the Montagu-Chelmsford Reforms Scheme, Army expenditure and the direction of military policy have been excluded from the control of the Legislature.

The Commander-in-Chief.—The next authority in the chain of administrative arrangements is His Excellency the Commander-in-Chief, who by custom is also the Army Member of the Viceroy's Executive Council. The appointment is held by His Excellency Field Marshal Sir William R. Birdwood, Bart., G.C.B., G.C.M.G., K.C.S.I., C.I.E., D.S.O., LL.D. He is also a member of the Council of State. All the work connected with the administration of the Army, the formulation and execution of the military policy of the Government of India, the responsibility for maintaining every branch of the Army, combatant and non-combatant, in a state of efficiency, and the supreme direction of any military operations based upon India are centred in one authority,—the Commander-in-Chief and Army Member. In addition, he administers the Royal Indian Marine and the Royal Air Force in India. The Commander-in-Chief is assisted in the executive side of his administration by 4 Principal Staff Officers, *viz.*, the Chief of the General Staff, the Adjutant-General, the Quarter-Master-General and the Master-General of Supply.

The Army Department.—The Staff of the Army Department Secretariat consists of a Secretary who, like the Secretaries in the civil departments, is a Secretary to the Government of India as a whole, possessing the constitutional right of access to the Viceroy, he is also for the purposes of Sub-section 4, Section 26 of the Regimental Debts Act, 1893 (56 Vict-C. 5) and the Regulations made thereunder Secretary to the Government of India in the Military Department, and for purposes of the Royal Indian Marine, Secretary to the Government of India in the Marine Department; Deputy Secretary, an Establishment Officer, a Director of Military Lands and Cantonments, three Assistant Secretaries, (one of whom is also Secretary of the Indian Soldiers' Board) and the Officer-in-charge, Medal Distribution.

The Army Department deals with all army services proper, and also the administration of the Royal Indian Marine and the Royal Air Force in India, in so far as questions requiring the orders of the Government of India are concerned. The Army Department Secretariat has no direct relations with commanders or troops or the staffs of formations subordinate to Army Headquarters: it has continuous and intimate relations with Army Headquarters in all administration matters and is responsible for the administration of Cantonments, the estates of deceased officers and the compilation of the India Army List. The Army administration is represented in the Legislature by the Army Member in the Council of State, and by the Army Secretary in the Legislative Assembly.

The Military Council—Is composed of the Commander-in-Chief as President, and the following members, namely: The Chief of the General Staff, as Vice President, the Adjutant-General, the Quarter-Master-General, the Master-General of Supply, the Secretary to the Government of India in the Army Department and the Financial Adviser, Military Finance, representing the Finance Department of the Government of India. It is mainly an advisory body, constituted for the purpose of assisting the Commander-in-Chief in the performance of his administrative duties. It has no collective responsibility. It meets when convened by the Commander-in-Chief for the consideration of cases of sufficient importance and difficulty to require examination in conference. The heads of the minor independent branches of Army Headquarters and the directors of technical services attend when required.

Military Territorial Areas.

Indian Territory is divided in four commands each under a General Officer Commanding-in-Chief and the Independent District of Burma under a General Officer Commanding. The details of the organisation are given in the table on the next page and it will be seen that Commands comprise 14 districts: 4 Independent Brigades, and 33 Brigades of which four are temporary. The Northern Command, with its headquarters at Murree, coincides roughly with the Punjab and North-West Frontier Province; the Southern Command, with headquarters at Poona, coincides roughly with the Bombay and Madras Presidencies and part of the Central Provinces; the Eastern Command, with headquarters at Naini Tal, coincides roughly with the Bengal Presidency and the United Provinces; the Western Command, whose headquarters are at Quetta, covers Sind, Rajputana and Baluchistan.

The General Officer Commanding-in-Chief of each Command is responsible for the command administration, training and general efficiency of the troops stationed within his area, and also for all internal security arrangements.

Apart from the four Commands, the only formation directly controlled by Army Headquarters is the Burma district which, mainly because of its geographical situation, cannot conveniently be included in any of the four Command areas. The Aden Independent Brigade which was under the administrative control of the Government of India was transferred to the administrative control of His Majesty's Government from the 1st April 1972.

The distribution of the troops allotted to the Commands and districts has been determined by the principle that the striking force must be ready to function in war, commanded and constituted as it is in peace. With this end in view, the Army in India is now regarded as comprising three categories of troops:

(1) Covering Troops,
(2) The Field Army,
(3) Internal Security Troops.

The role of the Covering Force is to deal with minor frontier outbreaks and, in the event of major operations, to form a screen behind which mobilisation can proceed undisturbed. The force normally consists of 12½ infantry brigades with a due proportion of other arms.

The Field Army consists of 4 Divisions and 5 Cavalry Brigades. The Field Army is India's striking force in a major war.

Army Headquarters.

The organization of the Army Headquarters with the Commander-in-Chief as the head, is founded upon four Principal Staff Officers charged with the administration of—

(*a*) The General Staff Branch;
(*b*) The Adjutant-General's Branch;
(*c*) The Quartermaster-General's Branch.
(*d*) The Master-General of Supply's Branch.

The General Staff Branch deals with military policy, with plans of operations for the defence of India, with the organization and distribution of the army for internal security and external use, the administration of the General Staff in India the supervision of the training of the military forces for war, the education of Officers, the supervision of the education of Warrant and Non-commissioned Officers and men of the Army in India, and Inter-Communication Services.

The Adjutant-General's Branch deals with all matters appertaining to the raising, organising and maintenance of the military forces in officers and men, the peace distribution of the army, discipline, pay and pensions, etc. Martial, Military and International Law, Medical and Sanitary matters affecting the Army in India, Personal and ceremonial questions, Prisoners of war. The Judge Advocate-General forms part of the Branch. The Director of Medical Services in India, who was independent before the war, is now included in the Adjustant-General Branch.

The Quartermaster-General's Branch is concerned with the specification, provision, inspection, maintenance and issue of supplies, *i.e.*, foodstuffs, forage, fuel, clothing, armaments, ammunition, equipment, etc., and is responsible for the following Services:—Transportation, Movements, Quartering, Supply and Transport, Equipment and Ordnance Stores, Remounts and Veterinary, Garrison and Regimental Institutes. Purchase of minor supplies not provided in bulk by the authority responsible for production and provision.

The Master-General of Supply's Branch controls the ordnance and clothing factories, the Military farms and conducts all matter relating to contracts in respect of food-stuffs, etc., and supply in bulk of clothing and necessaries, general stores and materials. The Master-General is also responsible for the design,

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Several minor re-organizations took place during the following years, such as the linking of three Regiments together and the raising of Class Regiments and Companies. In 1895 the next large reorganization took place. This was the abolition of the three Armies and the introduction of the command system. Four Commands were formed, *viz*: Punjab, Bengal, Madras and Bombay.

Lord Kitchener's Scheme.—This system lasted until 1904 when under Lord Kitchener's re-organization the Madras Command was abolished and the Army divided into three Commands—the Northern, Eastern and Western, corresponding to the Punjab, Bombay and Bengal Commands.

In 1907, Lord Kitchener considered that consequent on the delegation of administrative powers to Divisional Commanders, retention of such powers by Lieutenant-Generals of Commands led to delay in the despatch of business. The Command system was therefore abolished and India was divided into two Armies—the Northern and Southern—each under a General Officer who was responsible for the command, inspection and training of the troops but was given no administrative responsibilities.

Early in the War both Army Commanders took the field and were not replaced until 1916 and 1917 when both had practically the same functions as. their predecessors. It was now realised that administration was being unduly centralised at Army Headquarters and the machinery was becoming clogged with unnecessary details. To secure efficiency at A. H. Q., therefore, a certain measure of decentralisation was carried out in 1918. With the alteration of the designation "Army" to "Command" at this time, a considerable increase was made in the administrative staffs of the two Commands and the General Officers Commanding were given powers to deal with all administrative questions other than those dealing with matters of policy, new principles or war.

The commands were increased to four in 1920, each under a General Officer Commanding-in-Chief.

Present System of Administration

The essential features of the Army, as constructed on its present basis, will be found in "The Army in India and its Evolution," a publication issued with the authority of the Government of India in 1924.

The Secretary of State, as one of His Majesty's ministers, has a special responsibility and authority in regard to the military administration in India.

The Secretary of State's principal adviser on Indian military affairs is the Secretary in the Military Department of the India Office. The post is filled by an officer of the Indian Army of high rank with recent Indian experience. The appointment is at present held by Field Marshal Sir Claud Jacob, G.C.B., K.C.S.I., K.C.M.G., who was formerly General Officer Commanding-in-Chief of the Northern Command and officiated as Commander-in-Chief from April 1925 to August 1925. The Military Secretary is assisted by one first grade staff officer, selected from the Indian Army. In order that he may keep in touch with the current Indian affairs, the Military Secretary is expected to visit India during the tenure of his office. In addition, by a practice which has obtained for many years, a retired Indian Army officer of high rank has a seat upon the Secretary of State's Council.

The superintendence, direction and control of the civil and military government of India are vested in the Governor-General in Council, who is required to pay due obedience to all such orders as he may receive from the Secretary of State. The Viceroy's Executive Council exercise in respect of Army administration the same authority and functions as they exercise in respect of other departments of the Government; in the first phase of the representative institutions conferred upon India by the Montagu-Chelmsford Reforms Scheme, Army expenditure and the direction of military policy have been excluded from the control of the Legislature.

The Commander-in-Chief.—The next authority in the chain of administrative arrangements is His Excellency the Commander-in-Chief, who by custom is also the Army Member of the Viceroy's Executive Council. The appointment is held by His Excellency Field Marshal Sir William R. Birdwood, Bart., G.C.B., G.C.M.G., K.C.S.I., C.I.E., D.S.O., LL.D. He is also a member of the Council of State. All the work connected with the administration of the Army, the formulation and execution of the military policy of the Government of India, the responsibility for maintaining every branch of the Army, combatant and non-combatant, in a state of efficiency, and the supreme direction of any military operations based upon India are centred in one authority,—the Commander-in-Chief and Army Member. In addition, he administers the Royal Indian Marine and the Royal Air Force in India. The Commander-in-Chief is assisted in the executive side of his administration by 4 Principal Staff Officers, *viz.*, the Chief of the General Staff, the Adjutant-General, the Quarter-Master-General and the Master-General of Supply.

The Army Department.—The Staff of the Army Department Secretariat consists of a Secretary who, like the Secretaries in the civil departments, is a Secretary to the Government of India as a whole, possessing the constitutional right of access to the Viceroy, he is also for the purposes of Sub-section 4, Section 26 of the Regimental Debts Act, 1893 (56 Vict. C. 5) and the Regulations made thereunder Secretary to the Government of India in the Military Department, and for purposes of the Royal Indian Marine, Secretary to the Government of India in the Marine Department; Deputy Secretary, an Establishment Officer, a Director of Military Lands and Cantonments, three Assistant Secretaries, (one of whom is also Secretary of the Indian Soldiers' Board) and the Officer-in-charge, Medal Distribution.

The Army Department deals with all army services proper, and also the administration of the Royal Indian Marine and the Royal Air Force in India, in so far as questions requiring the orders of the Government of India are concerned. The Army Department Secretariat has no direct relations with commanders or troops or the staffs of formations subordinate to Army Headquarters: it has continuous and intimate relations with Army Headquarters in all administration matters and is responsible for the administration of Cantonments, the estates of deceased officers and the compilation of the India Army List. The Army administration is represented in the Legislature by the Army Member in the Council of State, and by the Army Secretary in the Legislative Assembly.

The Military Council—Is composed of the Commander-in-Chief as President, and the following members, namely: The Chief of the General Staff, as Vice President, the Adjutant-General, the Quarter-Master-General, the Master-General of Supply, the Secretary to the Government of India in the Army Department and the Financial Adviser, Military Finance, representing the Finance Department of the Government of India. It is mainly an advisory body, constituted for the purpose of assisting the Commander-in-Chief in the performance of his administrative duties. It has no collective responsibility. It meets when convened by the Commander-in-Chief for the consideration of cases of sufficient importance and difficulty to require examination in conference. The heads of the minor independent branches of Army Headquarters and the directors of technical services attend when required.

Military Territorial Areas.

Indian Territory is divided in four commands each under a General Officer Commanding-in-Chief and the Independent District of Burma under a General Officer Commanding. The details of the organisation are given in the table on the next page and it will be seen that Commands comprise 14 districts: 4 Independent Brigades, and 33 Brigades of which four are temporary. The Northern Command, with its headquarters at Murree, coincides roughly with the Punjab and North-West Frontier Province; the Southern Command, with headquarters at Poona, coincides roughly with the Bombay and Madras Presidencies and part of the Central Provinces; the Eastern Command, with headquarters at Naini Tal, coincides roughly with the Bengal Presidency and the United Provinces; the Western Command, whose headquarters are at Quetta, covers Sind, Rajputana and Baluchistan.

The General Officer Commanding-in-Chief of each Command is responsible for the command administration, training and general efficiency of the troops stationed within his area, and also for all internal security arrangements.

Apart from the four Commands, the only formation directly controlled by Army Headquarters is the Burma district which, mainly because of its geographical situation, cannot conveniently be included in any of the four Command areas. The Aden Independent Brigade which was under the administrative control of the Government of India was transferred to the administrative control of His Majesty's Government from the 1st April 1972.

The distribution of the troops allotted to the Commands and districts has been determined by the principle that the striking force must be ready to function in war, commanded and constituted as it is in peace. With this end in view, the Army in India is now regarded as comprising three categories of troops:

(1) Covering Troops,
(2) The Field Army,
(3) Internal Security Troops.

The role of the Covering Force is to deal with minor frontier outbreaks and, in the event of major operations, to form a screen behind which mobilisation can proceed undisturbed. The force normally consists of 12¼ infantry brigades with a due proportion of other arms.

The Field Army consists of 4 Divisions and 5 Cavalry Brigades. The Field Army is India's striking force in a major war.

Army Headquarters.

The organization of the Army Headquarters with the Commander-in-Chief as the head, is founded upon four Principal Staff Officers charged with the administration of—

(*a*) The General Staff Branch;
(*b*) The Adjutant-General's Branch;
(*c*) The Quartermaster-General's Branch.
(*d*) The Master-General of Supply's Branch.

The General Staff Branch deals with military policy, with plans of operations for the defence of India, with the organization and distribution of the army for internal security and external use, the administration of the General Staff in India the supervision of the training of the military forces for war, the education of Officers, the supervision of the education of Warrant and Non-commissioned Officers and men of the Army in India, and Inter-Communication Services.

The Adjutant-General's Branch deals with all matters appertaining to the raising, organising and maintenance of the military forces in officers and men, the peace distribution of the army, discipline, pay and pensions, etc. Martial, Military and International Law, Medical and Sanitary matters affecting the Army in India, Personal and ceremonial questions, Prisoners of war. The Judge Advocate-General forms part of the Branch. The Director of Medical Services in India, who was independent before the war, is now included in the Adjustant-General Branch.

The Quartermaster-General's Branch is concerned with the specification, provision, inspection, maintenance and issue of supplies, *i.e.*, foodstuffs, forage, fuel, clothing, armaments, ammunition, equipment, etc., and is responsible for the following Services:—Transportation, Movements, Quartering, Supply and Transport, Equipment and Ordnance Stores, Remounts and Veterinary, Garrison and Regimental Institutes. Purchase of minor supplies not provided in bulk by the authority responsible for production and provision.

The Master-General of Supply's Branch controls the ordnance and clothing factories, the Military farms and conducts all matter relating to contracts in respect of food-stuffs, etc., and supply in bulk of clothing and necessaries, general stores and materials. The Master-General is also responsible for the design,

Plan Showing Chain of Command.
THE COMMANDER-IN-CHIEF.
General Officer Commanding, Burma Ind. District. (2nd class.)
—Commander, Rangoon Brigade Area.
General Officer Commanding-in-Chief, Southern Command.
—General Officer Commanding—Madras District. (2nd class.)
—Commander, Southern Brigade Area.
—General Officer Commanding—Bombay District (2nd class.)
Commanding, Poona (Independent) Brigade Area.
—General Officer Commanding—Poona District (1st class).
—Brigade Commander, 4th (Secunderabad) Cavalry Brigade.
—Brigade Commander, 11th (Ahmednagar) Infantry Brigade.
—Brigade Commander, 12th (Secunderabad) Infantry Brigade.
—General Officer Commanding—Madras District (2nd class.)
—Brigade Commander, 10th (Jubbulpore) Infantry Brigade.
General Officer Commanding-in-Chief, Eastern Command.
—General Officer Commanding—Presidency and Assam District. (2nd class.)
—General Officer Commanding—Lucknow District (2nd class.)
—Brigade Commander, 6th (Lucknow) Infantry Brigade.
—Commander, Allahabad Brigade Area.
—Commander Delhi (Independent,) Brigade Area.
—General Officer Commanding—Meerut District. (1st class.)
—Brigade Commander, 3rd (Meerut) Cavalry Brigade.
—Brigade Commander, 7th (Dehra Dun) Infantry Brigade.
—Brigade Commander, 8th (Bareilly) Infantry Brigade.
—Brigade Commander, 9th (Jhansi) Infantry Brigade
General Officer Commanding-in-Chief, Western Command.
—General Officer Commanding—Baluchistan District. (1st class.)
—Brigade Commander, 4th (Quetta) Infantry Brigade.
—Brigade Commander, 5th (Quetta) Infantry Brigade.
Commander, Zhob (Independent) Brigade Area.
Commander, Sind (Independent) Brigade Area.
General Officer Commanding-in-Chief, Northern Command.
—General Officer Commanding—Waziristan District. (2nd class.)
—Commander, Razmak Brigade.
—Commander, Bannu Brigade.
—Commander, Manzai Brigade.
—General Officer Commanding—Lahore District. (1st class.)
Brigade Commander, 2nd (Sialkot) Cavalry Brigade.
Commander, Ferozepur Brigade Area.
Commander, Multan Brigade. Area.
Commander, Jullunder Brigade Area.
Commander, Lahore Brigade Area.
Commander, Ambala Brigade Area.
—General Officer Commanding—Rawalpindi District (1st class.)
—Brigade Commander 1st (Abbottabad) Infantry Brigade.
—Brigade Commander, 2nd (Rawalpindi) Infantry Brigade.
—Brigade Commander, 3rd (Jhelum) Infantry Brigade.
—General Officer Commanding—Kohat District. (2nd class.)
—Commander, Kohat Brigade.
—General Officer Commanding—Peshawar District. (1st class.)
—Commander, Landikotal Brigade.
—Commander, Peshawar Brigade.
—Commander, Nowshera Brigade.
—Brigade Commander, 1st (Risalpur) Cavalry Brigade.

Plan Showing Chain of Command.
THE COMMANDER-IN-CHIEF.
General Officer Commanding, Burma Ind. District. (2nd class.)
—Commander, Rangoon Brigade Area.
General Officer Commanding-in-Chief, Southern Command.
—General Officer Commanding—Madras District. (2nd class.)
—Commander, Southern Brigade Area.
—General Officer Commanding—Bombay District (2nd class.)
Commanding, Poona (Independent) Brigade Area.
—General Officer Commanding—Poona District (1st class).
—Brigade Commander, 4th (Secunderabad) Cavalry Brigade.
—Brigade Commander, 11th (Ahmednagar) Infantry Brigade.
—Brigade Commander, 12th (Secunderabad) Infantry Brigade.
—Brigade Commander, 10th (Jubbulpore) Infantry Brigade.
—General Officer Commanding—Madras District (2nd class.)
General Officer Commanding-in-Chief, Eastern Command.
—General Officer Commanding—Presidency and Assam District. (2nd class.)
—General Officer Commanding—Lucknow District (2nd class.)
—Brigade Commander, 6th (Lucknow) Infantry Brigade.
—Commander, Allahabad Brigade Area.
—Commander Delhi (Independent,) Brigade Area.
—General Officer Commanding—Meerut District. (1st class.)
—Brigade Commander, 3rd (Meerut) Cavalry Brigade.
—Brigade Commander, 7th (Dehra Dun) Infantry Brigade.
—Brigade Commander, 8th (Bareilly) Infantry Brigade.
—Brigade Commander, 9th (Jhansi) Infantry Brigade
General Officer Commanding-in-Chief, Western Command.
—General Officer Commanding—Baluchistan District. (1st class.)
—Brigade Commander, 4th (Quetta) Infantry Brigade.
—Brigade Commander, 5th (Quetta) Infantry Brigade.
Commander, Zhob (Independent) Brigade Area.
Commander, Sind (Independent) Brigade Area.
General Officer Commanding-in-Chief, Northern Command.
—General Officer Commanding—Waziristan District. (2nd class.)
—Commander, Razmak Brigade.
—Commander, Bannu Brigade.
—Commander, Manzai Brigade.
—General Officer Commanding—Lahore District. (1st class.)
Brigade Commander, 2nd (Sialkot) Cavalry Brigade.
Commander, Ferozepur Brigade Area
Commander, Multan Brigade. Area.
Commander, Jullunder Brigade Area.
Commander, Lahore Brigade Area.
Commander, Ambala Brigade Area.
—General Officer Commanding—Rawalpindi District (1st class.)
—Brigade Commander 1st (Abbottabad) Infantry Brigade.
—Brigade Commander, 2nd (Rawalpindi) Infantry Brigade.
—Brigade Commander, 3rd (Jhelum) Infantry Brigade.
—General Officer Commanding—Kohat District. (2nd class.)
—Commander, Kohat Brigade.
—General Officer Commanding—Peshawar District. (1st class.)
—Commander, Landikotal Brigade.
—Commander, Peshawar Brigade.
—Commander, Nowshera Brigade.
—Brigade Commander, 1st (Risalpur) Cavalry Brigade.

inspection, and supply of guns, carriages, tanks, small arms, machine guns, chemical warfare appliances, etc. He also deals with questions regarding patents, royalties and inventions.

There are other branches of Army Headquarters administered by officers who are not classified as Principal Staff Officers, but are not directly subordinate to any of the four Principal Staff Officers.

These are:

(1) The Military Secretary, usually a Major-General, who deals with the appointment, promotion and retirement of officers holding the King's Commission, the selection of officers for staff appointments, and the appointment of officers to the Army in India Reserve of Officers.

(2) The Engineer-in-Chief, also a Major-General and head of the Corps of Royal Engineers in India. He is responsible for Engineer operations and Engineer Services during War and Peace and preparedness for War of the Engineering services. The supply of Engineer Stores during War and Peace. The construction and maintenance of all military works and the constructional efficiency, accuracy and economy of all projects and designs.

In addition to the above, the Army Headquarters staff includes certain technical advisers, fo whom the most important are the Major General, Cavalry, the Major-General, Royal Artillery, the Colonel, Royal Tank Corps, the Brigadier, Royal Engineers, the Signal Officer-in-Chief, and the Adviser and Secretary Board of Examiners.

Regular British Forces in India.

The British cavalry and British infantry units of the army in India are units of the British service. No individual British service unit is located permanently in India. Units of the British Army are detailed for a tour of foreign service, of which the major part is as a rule spent in India. In the case of British infantry battalions the system is that one battalion of a regiment is normally on home service while the other is overseas. The tour of overseas service of a British battalion is usually 16 years. In the case of British cavalry the same arrangement cannot be applied, as one unit only comprises the regiment. The normal tour of overseas duty for a regiment of British cavalry is 14 years. In Great Britain, in peace-time, units are maintained at an establishment smaller than that required for war. In India, the peace establishments exceed the war establishments in view of the fact that reserves of British personnel do not exist, and reinforcements must be obtained from Great Britain.

British Cavalry.—There are 5 British cavalry regiments in India. The establishment of a British cavalry regiment is 27 officers and 571 other ranks.

British Infantry.—The present number of British infantry battalions in India is 45, each with an establishment of 28 officers and 882 other ranks.

In 1921, an important change was made in the composition of a British infantry battalion in India by the inclusion of a proportion of Indian combatant ranks. Battalions had always maintained a quota of Indian followers, but uy to 1921 the combatant personnel was entirele British. In 1921, on the abolition of the Machine Gun Corps, eight machine guns were included in the equipment of a British infantry battalion. The peace establishment of Indian combatant personnel is fixed at one Indian officer and forty-one Indian other ranks. The Indian platoon, as it is called, is transferred *en bloc* to another British battalion when the battalion to which it was originally attached proceeds on relief out of India.

Royal Artillery.—Indians are employed as drivers and artificers in the Royal Horse Artillery and in field and medium batteries, as drivers, gunners and artificers in pack batteries, and as gunners in heavy batteries.

The peace organisation of the artillery at the present day is as follows:

Royal Horse Artillery.—Comprises four batteries and four ammunition columns. Each battery is armed with six 13-pounder guns.

Field (Higher and Lower Establishment) Brigades.—Seven brigades on the higher establishment, each consisting of headquarters and four batteries. Three brigades on the lower establishment, each consisting of headquarters and four batteries. Of the seven brigades on the higher establishment, four-brigades consist of two batteries, each armed with six 18-pounder guns, and two batteries each with six 4·5″ howitzers. Three brigades consist of three batteries, each armed with six 18-pounder guns, and one battery with six 4·5″ howitzers. Of the three brigades on the lower establishment two consist of three batteries, each armed with six 18-pounder guns, and one battery with six 4·5″ howitzers, and one brigade of two batteries armed with six 18-pounder guns, and two batteries armed with 4·5″ howitzers. Two guns in each battery are immobile.

Field (Reinforcement) Brigade.—The reinforcement brigade consists of two double batteries, each armed with six 18-pounder guns, and two 4·5″ howitzers.

Ammunition Columns.—Two Divisional ammunition columns are maintained for the artillery of the first and second divisions, and one field ammunition column for the covering force brigade on the frontier.

Indian Mountain Brigades.—Six brigades, each consisting of headquarters, one British light and three Indian mountain batteries, also one unbrigaded mountain battery and one mountain Artillery Section for Chitral. The British battery and two Indian batteries per brigade are armed, with four 3.7″ howitzers; the remaining batteries are armed with four 2.75″ guns. The armaments of the Frontier posts at Kohat. Fort Lockhart, Idak, Razani Damdil. Thal, Chaman, Hindubagh; Malakand Landi Kotal; Arawali Shagai; Chakdara and Fort Sandeman are also manned by personnel of Indian Mountain Brigades. R. A.

Medium Brigades.—Two brigades, each consisting of one horsedrawn and three tractor drawn batteries. In one brigade, the horse drawn battery is armed with 60-pounder guns in the other, with 6″ howitzers.

Heavy Brigade.—Headquarters and two batteries at Bombay, and one battery at Karachi.

As a commencement thas been decided to mechanise the 1st Field Brigade and 2nd Divisional Ammunition Column, Royal Artillery, which units will eventually be located at Quetta. Other Royal Artillery units will be mechanised in due course.

Artillery Training Centres.—One centre for Indian ranks of R. H. A. and of field and medium batteries and another centre for Indian ranks of pack batteries. These centres were created for the recruitment and training of Indian personnel.

Engineer Services.

The Engineer-in-Chief.—The head of the Corps of Royal Engineers in India is directly responsible to His Excellency the Commander-in-Chief. The Engineer-in-Chief is not a Staff Officer, but the technical adviser of the Commander-in-Chief on all military engineering matters and is responsible for:

(1) Engineer operations and engineer services during war and peace.

(2) The preparedness for war of the engineering services.

(3) The supply of engineer stores during war and peace.

(4) The execution and maintenance of all military works.

(5) The constructional efficiency, accuracy and economy of all projects and designs submitted by him.

The Organisation.—The Engineer organisation of the Army consists of two main branches, *viz.*, the "Sappers and Miners" and "Pioneers" and the Military Engineer Services.

The composition of the Corps of Sappers and Miners is as follows:

King George's Own Bengal Sappers and Miners, with headquarters at Roorkee. Queen Victoria's Own Madras Sappers and Miners, with headquarters at Bangalore, Royal Bombay Sappers and Miners, with headquarters at Kirkee. Burma Sappers and Miners, with Headquarters at Mandalay.

The personnel of the Corps consists of Royal Engineer officers, Indian officers holding the Viceroy's commission, a certain number of British warrant and non-commissioned officers, Indian non-commissioned officers and Indian other ranks. The first three Corps are commanded by a Lieut.-Colonel, who is assisted by two Majors, as Superintendents of Park and Instruction, an Adjutant, a Quartermaster, two Subadar-Majors, a Jemadar Adjutant and a Jemadar Quartermaster. The staff of the Burma Sappers and Miners is proportionately less.

Field Troops are mounted units, trained to accompany cavalry, and are equipped to carry out hasty bridging, demolition and watersupply work. Field Companies are trained to accompany infantry. Divisional Headquarters' Companies are small units containing highly qualified "tradesmen" and are trained to carry out technical work in connection with field workshops. Army Troops Companies are somewhat smaller units than field companies; they are required to carry out work behind divisions, under the orders of Chief Engineers, *e.g.*, heavy bridging work, large water-supplies, electrical and mechanical installation.

The Military Engineer Services control all military works in India, and Burma except in the case of a few small outlying military stations, which are in charge of Public Works Department. They control all works for the Royal Air Force and for the Royal Indian Marine; and they are charged with all civil works in the North-West Frontier Province and Baluchistan under the orders, in each of these two areas, of the Chief Commissioner and Agent to the Governor-General. They also control civil works in Bangalore, under the Mysore Government.

The Engineer-in-Chief is assisted by a Deputy Engineer-in-Chief (Works) and a Deputy Engineer-in-Chief (Electrical and Mechanical). In each Command there is a Chief Engineer, while in the Northern Command a Deputy Chief Engineer administers Military and Civil works in the N. W. F. P. and is Secretary, P. W. D., to the Chief Commissioner. The Chief Engineer, Western Command, is the Secretary, P. W. D., to the Agent to the Governor-General in Baluchistan. Both at Army Headquarters and in Commands there are Staff Officers, R. E., and Technical Officers. At the headquarters of each district there is a Commanding Royal Engineer, assisted in the 1st and 2nd class districts by A. C. R. Es. Officers of the Barrack Department are also employed as District Stores Officers. Garrison Engineers are in charge of brigade areas and military stations, their charges being divided into subdivisions under Sub-divisional Officers. The sub-divisions are Buildings and Roads, Electrical and Mechanical, and Furniture and Stores. There are sub-overseers for Buildings and Roads and the Barrack Department subordinates in charge of Furniture and Stores are assisted by store-keepers.

Royal Air Force in India.

The Royal Air Force in India is controlled by the Commander-in-Chief in India as part of the defence services of the Indian Empire. The Air Force budget is incorporated in the Military Estimates. The Commander of the Air Force, the Air Officer Commanding in India is an Air Vice-Marshal whose rank corresponds to that of a Major-General in the Army.

The headquarters of the Air Force is closely associated with Army Headquarters and is located with the latter at the seat of the Government of India. The Air Officer Commanding has a headquarters staff constituted in six branches, namely, air staff, personnel, technical, stores, medical and chief engineer. The system of staff organisation is similar to the staff system obtaining in the Army. Broadly speaking, the duties assigned to the divisions mentioned are those which are performed by the General Staff Branch, the Adjutant-General's and Military Secretary's branches, the Quartermaster-General's Branch, the Medical Directorate and the Engineer in Chief's branch respectively, of Army Headquarters.

Subordinate formations.—The formations subordinate to the Royal Air Force Headquarters after the re-organisation has been effected are:—

(*i*) Group Command, which will in turn control 2 Wing Stations, comprising two squadrons each, on a station basis.

(*ii*) Wing Command which will in turn control two squadrons not on a station basis.

(*iii*) Station Commands.

(*iv*) The Aircraft Depot.

(*v*) The Aircraft Park.

Group Command.—The Group Command will consist of a Group Headquarters, which will be known as No. 1 (Indian) Group Headquarters, and will be located at Peshawar. The Group Commander will be of the rank of Group Captain, and will correspond in rank to that of a Colonel in the Army. He will be equipped with a staff on approximately the same system as the R.A.F. Headquarters staff of the R.A.F. in India. The establishment of the Group consists of 4 officers and 16 airmen.

The subordinate units to No. 1 (Indian) Group Headquarters will be as follows :—

No. 1 Wing Station, R.A.F., Peshawar.
No. 2 Wing Station, R.A.F., Risalpur.
1Army Co-operation located at Peshawar.
R. A. F. Hill Depot, Lower Topa.

Wing Command.—There will be one Wing Command only namely 3 (Indian) Wing, R.A.F., located at Quetta. The Wing Commander is an officer with Air Force rank corresponding to the rank of a Lieutenant-Colonel in the Army.

He is equipped with a staff organised on approximately the same system as the Headquarter of a Group. The Wing Establishment consists of 4 officers and 17 airmen.

Wing Station Commands.—There will be 2 Wing station commands in India, one located at Peshawar and the other at Risalpur. Each station will consist of two squadrons on a reduced squadron basis with one administrative head, *i.e.*, Station Headquarters under the command of a Wing Commander. The strength of the Station Headquarters will be 8 officers and 116 airmen, while that of the two squadrons total 24 officers and 102 airmen.

The Squadrons.—Of the 8 squadrons 7 will be extended along the North West Frontier from Quetta to Risalpur, and one will be stationed at Ambala.

The squadron is the primary air force unit, and it consists, normally, of a Headquarters and three flights of aeropanes. A flight can be detached temporarily but not permanently from its squadron as repair facilities, workshops and stores cannot economically be organised on anything less than a squadron basis. The squadrons headquarters comprises the officers and other ranks required for the command and administration of the squadron as a whole ; it includes the workshops and repair units, the armouries and equipment stores of the squadrons.

The number of aeroplanes in a squadron varies with the type of aeroplane with which the squadron is equipped ; but speaking generally squadrons on a peace basis have twelve aeroplanes *i.e.*, four in each of three flights. This does not however apply to the twin engined bombing squadrons.

Of the 8 squadrons 2 are equipped with D. H. 9a's and 2 with Wapitis and they are allotted for distant reconnaissance and bombing duties ; the other four, which are allotted for Army Co-operation duties, have Bristol Fighter aeroplanes.

Typical Squadron Establishment.—The establishment of officers in a squadron consists of six officers in the Headquarters, and fifteen officers allotted to flying duties. This allows a reserve of one officer for each of the operative flights.

The establishment of other ranks is 117 airmen.

The Aircraft Depot.—The Aircraft Depot may be conveniently described as the wholesale store and provision department of the Royal Air Force. Technical stores are received from the United Kingdom, and in the first instance, held by this unit. It is also the main workshop and repair shop of the Force, where all engine repairs, mechanical transport repairs, and aircraft repairs of any magnitude are carried out. The Depot is located at Karachi.

The Aircraft Park.—Relatively to the Aircraft Depot, the Aircraft Park may be described as a central retail establishment, intermediate between the squadrons and the Aircraft Depot. It receives stores from the depot and distributes them to the squadron. The Stocks held in the Park are, however, usually limited to items necessary at short notice for operations, and the quantities held are kept as low as distance from the depot and local conditions will admit. In war, an Aircraft Park is intended to be amobile formation, though the aircraft Park in India cannot be made mobile under ordinary conditions. In peace, the Aircraft Park is located at Lahore. New aeroplanes received from the United Kingdom are erected there, but no major repairs are undertaken. In addition to the above functions, practically the whole of the motor transport bodies requred for R. A. F. vehicles are built or repaired at Aircraft Park.

Composition of Establishments.—The personnel of the Royal Air Force in India consists of Officers, Warrant Officers, Non-commissioned officers and men in the ranks of the R. A. F. of the United Kingdom, and Indian Artificer, Mechanical Transport Drivers and Followers of the Indian Technical and Followers Corps, R. A. F. in India. The officers are employed on administration, flying and technical duties but all with the exception of officers of the store and medical branches are requred to be capable of flying an aeroplane. A proportion of non-commissioned officers are also trained and employed as pliots for a period of five years, after which period, they revert to their technical trades. Apart from these airmen all Warrant Officers, Non-commissioned officers and aircrafts men are employed solely on technical duties. The only other flying personnel who are not officers or N.C.O. pilots are air gunners and a certain percentage of wireless operators.

The Warrant Officers, non-commissioned officers and aircraftsmen are employed at all units. The personnel of the Indian Technical and Followers Corps are employed as follows :—

(*a*) Technical Section . . Aircraft Park. Aircraft Depot.
(*b*) M. T. Drivers Section . All Units.
(*c*) Followers Section . . All Units.

(*a*) Consists of Artificers of the trades or Carpenter, Fitter, Fabric Worker, Motor Body Builder Acetylene Welder, Turner, Blacksmith and Upholsterer.

(*b*) Drivers of the R.A.F. Mechanical Transport.

(c) Class I and II Followers, i.e., Cooks, Sweepers Bhisties, Beldars and Lascars. The total establishment of the Royal Air Force in India after re-organisation will be as follows:—

Officers	.. ..	258
Airmen	.. ..	1,874
Indians	.. ..	1,253

The Royal Air Force Medical Services.—In India, as in the United Kingdom, the Air Force has a medical service of its own. Flying must still be regarded at present as an abnormal pursuit for the human being. It is carried out under conditions which differ widely from those on the ground. With the growth of aeronautics therefore, it was found necessary to create a separate department of medical science whose functions, broadly stated are to study the effect of flying upon the human constitution both mental and physical, to study also the effects of different forms of illness and physical disability upon flying efficiency and to apply in practical form the results ascertained. The essential object in view is to save life by ensuring, so far as possible that those who fly are physically and psychologically fit to do so. The present establishment of the Royal Air Force Medical Service in India consists of 12 officers and 30 airmen. The Medical Administration is controlled by the Prinicpal Medical Officer of the rank of Group Captain, on the staff of the Air Officer Commanding the R. A. F. in India.

Regular Indian Forces.

Indian Cavalry.—The present number of Indian cavalry regiments is 21.

The peace establishment of an Indian cavalry regiment comprises:

14 British officers.
19 Indian officers.
493 Indian non-commissioned officers and men.

Indian Infantry and Pioneers.—The establishment of the Indian Infantry is constituted as follows:

		Battalions
20	Infantry regiments consisting of ..	104
3	Pioneer regiments consisting of ..	11
1	Independent Pioneer battalion (4th Hazara Pioneers)	1
3	Regiments of Sappers and Miners ..	3
10	Gurkha regiments consisting of ..	20
37		139

The normal strength of an active battalion is—

	British Officers.	Indian Officers.	Indian other ranks
Infantry ..	12	20	742
Pioneers ..	12	16	720
Gurkhas ..	13	23	920

The strength of a training battalion depends upon the number of battalions forming the regiment. The average is as follows:—

Infantry.—British Officers 9, Indian Officers 14, and Indian other ranks 636.

Pioneers.—British Officers 9, Indian Officers 11, and Indian other ranks 469.

The strength of the Independent Pioneer Battalion is British Officers 13, Indian Officers 18, and Indian other ranks 923.

Reserves for these units have to be sufficient to provide for an actual shortage on mobilisation as well as for the maintenance of the mobilised unit at full strength for the first 8 months after mobilisation.

Reserve.—The conditions of the reserve are as follows:—

(a) There are two classes in the reserve Class A and Class B. A reservist is eligible to serve in Class A up to 8 years' combined army and reserve service, and in Class B up to 15 years' combined service.

(b) Service in the reserve is compulsory. On enrolment a man engages to serve at least 5 years in army service, and to serve up to 15 years in combined army and reserve service, if required to do so.

(c) Reservists will be trained for not more than 1 month annually in the cases of Class A, and biennially in the case of Class B. During training the reservist will receive the full pay of a serving soldier.

(d) While not under training, the reservist will receive pay as follows:—

Class A, Rs. 7 per mensem.

Class B, Rs. 4 per mensem.

(e) A reservist will be discharged from the service after 15 years' combined army and reserve service, when he will receive a pension of Rs. 3 per mensem, or, if he desires it, a gratuity of Rs. 300 in lieu. A reservist who is invalided from the reserve is granted a gratuity varying between 3 and 6 months pay and good conduct pay according to service.

The establishment of reservists is fixed at present as follows:—

Cavalry	.. .. ..	2,943
Artillery	.. .. ..	2,520
Sappers & Miners	.. ..	1,710
Indian Signal Corps	.. ..	901
Infantry	.. .. ..	24,320
Gurkhas	.. .. ..	2,000
Pioneers	.. .. ..	1,240
Independent Pioneers	..	81
Total	..	35,715

The Indian Signal Corps.—The Corps is organised on the same lines as a Sapper and Miner Corps, with a headquarters for recruiting and training personnel, and detached field units for the various army formations. The head of the corps is the Signal Officer-in-Chief, who belongs to the Royal Corps of Signals and is attached to the General Staff Branch at

Army Headquarters as a technical adviser on questions connected with signals, and is also responsible for the technical inspection of all signal units. A chief signal officer with similar functions is attached to the headquarters of each Army Command. The British portion of the Corps has now been amalgamated with the Royal Corps of Signals.

The headquarters, termed the Signal Training Centre, India, are located at Jubbulpore, and are commanded by a Colonel, assisted by a staff, British and Indian, organised on very much the same lines as the headquarters of a Corps of Sappers and Miners.

The various types of field units and the number maintained are:—

Corps Signals Headquarters including Line and Wireless Company	2
Cavalry Brigade Signal Troops ..	4
Divisional Signals	4
Signal Parks	2
District Signals	3
Medium Brigade Royal Artillery Signal Section	1
Field Brigade Royal Artillery Signal Section	1

In addition, there is an Army Signal School which carries out the training of regimental signalling instructors.

The formation of the District signals units was effected in 1926 with the transfer of Communications on the North-West Frontier to the Posts and Telegraphs Department. This transfer of communications also made feasible the raising of the 'A' and 'C' troops of Cavalry Brigade Signals to include a Wireless Section each, the formation of two Corps Signal Headquarters and the formation of one Medium and one Field Brigade Royal Artillery Signals Sections. The District Signals are located at Peshawar, Waziristan and Kohat.

Royal Tank Corps.—Six Armoured Car Companies arrived in India in 1921. Two more Companies arrived in 1925. Two Group Headquarters were sanctioned in 1925. They are located as follows:—the Northern Group at Murree, this Group Headquarters commands Companies in the Northern and Eastern Commands. The Southern Group at Poona. This Group Headquarters commands Companies in the Southern and Western Commands. There is a school at Ahmednagar for the training of R. T. C. personnel and the conduct of experiments. The Colonel, Royal Tank Corps, at Army Head-quarters, acts as Technical Adviser on Tanks and Armoured Cars.

The smallest Tactical Unit is the sub-section (Two Armoured Cars). There are two sub-sections in a section, and 3 sections in a Company. Each section is commanded by a Captain or a subaltern, and the Company by a Major. In addition to 12 Armoured Cars (4 in each section), there is a mechanical reserve of 4 cars on the Headquarters of each Company.

5 Companies are equipped with Crossley Armoured Cars.

1 Company is equipped with Rolls-Royce 1921 Pattern.

1 Company is equipped with Rolls-Royce 1914.

1 Company is equipped with Austin Armoured Cars.

With the exception of the Company with Rolls-Royce 1914 pattern, which have only one Vickers Gun, all the remaining Armoured Cars are armed with two Vickers Guns.

The establishments of the Royal Tank Corps formations are shown below:—

—	British Officers.	British other ranks.	Followers.	Motor cars.	Motor cycles.	Armoured cars.	Lorries.
Group Headquarters	2	2	..	..	..	..	..
Tank Corps School	6	48	15	1	2	9	9
Armoured Car Company	12	145	39	2	6	16	10

Medical Services.—The military medical services in India are composed of the following categories of personnel and subordinate organisations:—

(*a*) Officers and other ranks of the Royal Army Medical Corps serving in India;

(*b*) Officers of the Indian Medical Service in military employment;

(*c*) The Indian Medical Department, consisting of two branches, *viz.*, (i) assistant surgeons and (ii) sub-assistant surgeons.

(*d*) Queen Alexandra's Imperial Military Nursing Service.

(*e*) The Queen Alexandra's Military Nursing Service for India.

(*f*) The Army Dental Corps.

(*g*) The Indian Military Nursing Service.

(*h*) The Indian Hospital Corps.

Of these categories, the officers and men of the Royal Army Medical Corps and the Army Dental Corps, the assistant surgeons of the

Indian Medical Department and the Queen Alexandra's Imperial Military Nursing Service and the Queen Alexandra's Military Nursing Service for India are primarily concerned with the medical care of British troops: while the officers of the Indian Medical Service, the sub-assistant surgeons of the Indian Medical Department and the Indian Troops Nursing Service are concerned, primarily, with the medical care of Indian troops. The Indian Hospital Corps serves both organisations.

Civilians of miscellaneous classes employed by the Army in Waziristan are given medical treatment in military hospitals, and arrangements have been made with the Headquarters of the Indian Red Cross Society for the medical treatment and care of cases amongst Indian Soldiers and followers of the Indian Army for chronic diseases, such as Tuberculosis, Leprosy and Diabetes.

Indian Army Service Corps and the Mechanical Transport Service.—The Indian Army Service Corps is the counterpart of the Royal Army Service Corps of the British Army. It has developed from the Commissariat Department of an earlier period, and its immediate predecessor was the Supply and Transport Corps, by which name the service was known up to a short time ago. The Indian Army Service Corps is administered by the Quartermaster-General, and is one of the principal services included in the Quartermaster-General's Department.

The Indian Army Service Corps is constituted in two main branches, namely: (*a*) Supply. (*b*) Animal transport, and is supplemented by the Mechanical Transport Service, which, in India, is constituted upon a special basis, but which is, generically, a sub-division of the Royal Army Service Corps organisation.

The strength of the establishment is shown by categories in the following table:—

SUPPLY.

Officers with King's commission ..	234
Indian officers	70
British other ranks..	360
Civilians	832
Followers	2,830
Total ..	4,326

ANIMAL TRANSPORT.

Officers with King's commissions.	90
Indian officers	184
British other ranks..	140
Civilians	146
Silladar Lance Naiks and Sarwans	960
Indian non-commissioned officers and drivers	14,139
Artificers and followers	2,184
Total ..	17,843

There are also 1,094 driver reservists.

The total numbers of mules and camels maintained under the present organisation, including the depots and the detachments in Aden, and Kashmir are 19,771 and 5,808 respectively. There are also 747 pack and draught horses and 612 ponies. Wheeled and pack transport are combined. The company on the lower establishment represents the pre-war "cadre," other companies being mantained in peace-time at full war establishment.

The mechanical transport establishment consists of the following:—

Light Lorries: 8 companies with 9 sections (higher establishment), 2 sections (lower establishment.) and 15 sections in cadres.

Apart from units and vehicles employed in the conveyance of military stores, the mechanical transport service also provides motor ambulance convoys for hospitals and field medical units, and vehicles for other miscellaneous purposes. The organisation as a whole is completed by a mechanical transport depot, a central stores depot, mobile repair units and workshops, of which the most important is the large heavy repair workshop constructed after the war at Chakala. Like the Indian Army Service Corps, the mechanical transport service is administered by the Director of Supply and Transport under the control of the Quarter Master-General. Exclusive of motor bicycles the total establishment now consists of 2,206 vehicles, with 982 vehicles spare and in reserve.

The mechanical transport is at present not actually a part of the Indian Army Service Corps. A scheme is, however, in operation by which the mechanical transport will be taken over by the Indian Army Service Corps. At present the officers of the service are mainly drawn from the Royal Army Service Corps, since at present there are no facilities in India for training officers in every branch of mechanical transport duties. The establishment of officers includes, however, a certain number of King's commissioned officers belonging to the Indian Army. The British subordinates of the service are drawn entirely from the Royal Army Service Corps. The establishment is completed by Indian officers with the Viceroy's commission, and Indian other ranks of the I.A.S.C. employed as drivers. A large number of Indians with non-combatant status are employed as artificers and followers. The strength and categories of the present establishments are shown in the following table:—

Officers with King's commissions.	157
Indian officers	37
British other ranks..	334
Indian other ranks	1,399
Civilians	333
Indian artificers	1,252
Followers	630
Total ..	4,142

There are also 2,138 reservists.

The post-war establishment of the Mechanical Transport in India will be as follows :—

(*a*) Field units—

8 Light M. T. Companies, consisting of 8 headquarters, 9 service sections (higher establishment), 2 service sections (lower establishment) and 15 sections in cadre.

10 M. T. Companies for motor ambulance convoys.

4 Mobile repair units.

(*b*) Maintenance units—

1 Heavy Repair shop.

3 Medium Repair Shops.

1 Central M. T. Stores Depot.

(*c*) Miscellaneous—

3 M. T. group, headquarters, M. T. technical inspectorate, I. M. T. depot for training Indian drivers and Aden M. T. Section.

The Ordnance Services which are partly under the Q.M.G. and partly under the M.G.S. may be broadly described as the agency whose duty it is to supply the army with munitions of war, such as small arms, guns, ammunition and other equipment of a technical military character, and also, under an arrangement introduced in recent years, with clothing and general stores other than engineering stores. A central disposal organisation is in operation under the control of the Master General of Supply to dispense with the Surplus Stores and waste materials of the different services of the Army and the Royal Air Force in India to the best advantage of the State.

Army Remount Department.—The following are among the most important duties imposed on the remount service:—(1) The mounting of the whole of the mounted services in India. (2) The provision of camels and draught bullocks for all units and services. (3) The maintenance of some 66,000 animals.(4) The enumeration throughout India of all animals available for transport in war. (5) The animal mobilization of all units, services and departments of the army. (6) A general responsibility for the efficiency of all the animals of the army both in peace and war. (7) The administration of the remount squadron formed in 1922 as a nucleus for expansion into three squadrons on mobilization. (8) Breeding operations of a direct character and a new horse-breeding area, which comprises the three civil districts of Multan, Montgomery and Dera Ghazi Khan, and will include the breeding grants in the lower Bari Doab Canal Colony.

The department is organised on lines corresponding to the remount service in the United Kingdom. Its composition is as follows: The Remount Directorate at Army Headquarters consisting of one Director, a Deputy Director, and a Staff Captain, 4 Remount officers, one attached to each Command Headquarters, 6 Superintendents of Remount Depots, 6 District Remount officers of horse-breeding areas and the Ahmednagar Stud, 15 Assistant Remount officers and 8 Veterinary officers.

Veterinary Services in India—The Veterinary Services are responsible for the veterinary care, in peace and war, of mounted British troops, Indian cavalry and artillery, I. A. S. C. units, the remount department (excluding horse-breeding operations), etc. The Veterinary Services include: The establishment of Royal Army Veterinary Corps officers, serving on a tour of duty in India. The establishment of warrant and non-commissioned officers, India Unattached List, and Veterinary Assistant Surgeons of the Indian Army Veterinary Corps.

The Indian Army Veterinary Corps is organised in 12 sections, attached in peace-time to Class I veterinary hospitals at certain important stations.

Military Farms Department.—This department, which is under the control of the Master General of Supply, consists of two branches :—

(i) The military grass farms, which provide fodder for the army.

(ii) The military dairy farms, for the provision of dairy produce for hospitals, troops and families.

Educational Services.—The education of the army is under the control of the Army Educational Corps and of Indian officers borne, supernumerary to the establishment of units of the Indian Army. The establishment is as follows including training schools :—

British officers.	Indian officers.	B. O. Rs.	I. O. Rs.	Civilians.
67	38	167	11	247

Terms of service in the Indian army are as follows :—

Cavalry, 7 years' service in army.

Artillery, 6 years' service in army for gunners, 5 for drivers and 4 for the Heavy Battery personnel.

S. & M. Corps, 7 years' service in army (5 for the Burma S. & M).

Indian Signal Corps, 5 years' service in army.

Infantry and Pioneers (except Gurkhas, the 4th Hazara Pioneers and trans-frontier personnel of the Infantry), 5 years in army service and 10 years in the reserve. (*Note*: This is the minimum period of service with the colours. 15 years in Colour and Reserve service must be done).

Gurkhas, 4th Hazara Pioneers, trans-frontier personnel of the Infantry, and Indian combatant personnel of British Infantry Battalions, 4 years' service in army.

Indian Military establishments of the Indian Army Ordnance Corps, 4 years' service in the army.

Animal transport personnel of the Indian Army Service Corps, drivers of mechanical transport and all combatants of the Army Veterinary Corps, 6 years' service in army and 4 in the reserve.

All combatants in the Works Corps, 2 years' service in army.

Bandsmen, musicians, trumpeters, drummers, buglers, fifers and pipers, 10 years' service in army.

Except in the case of those enrolled in the Works and of those who are non-combatants, all School-masters, clerks, artificers, armourers, engine drivers, farriers, carpenters, tailors and bootmakers, 10 years' service in army.

The period laid down for service in the army may be extended. Combatants may be enrolled direct into the Reserve, in which case there is no minimum period of service, but no one is allowed to serve in the reserve or in any class of the reserve for a longer period than is permitted by the regulations in force.

Frontier Militia and Levy Corps.—These forces are "Civil" troops, *i.e.*, they are administered and paid by the Civil authorities and not by the Army. They are, however, officered by Officers of the Regular Indian Army. These forces were raised for duty on the North-West Frontier and at present consist of the following:—Kurram Militia, Tochi Scouts, South Waziristan Scouts, Chitral Scouts, Gilgit Scouts, Zheb Levy Corps and the Mekran Levy Corps. The various names show the localities in which each force is situated.

The Auxiliary Force.

After the war, the question of universal training for European British subjects came up for consideration, and it was decided that in India, as elsewhere in the Empire, the adoption of compulsory military service would be undesirable. It was recognised, however, that India needed some adequate auxiliary force, if only on a voluntary basis, that could be trained to a fairly definite standard of efficiency; and in the result, an Act to constitute an Auxiliary Force for service in India was passed in 1920. Under this Act membership is limited to European British subjects, and the liability of members for training and service is clearly defined. Military training is graduated according to age, the more extended training being carried out by the younger members, the older members being obliged to fire a musketry course only. It was laid down that military service should be purely local. As the form of service that would be most suitable varies largely according to localities, the local military authorities, acting in consultation with the advisory committee of the Auxiliary Force area, were given the power of adjusting the form of training to suit local conditions.

The Auxiliary Force comprises all branches of the service, cavalry, artillery, engineers, infantry—in which are included railway battalions,—machine gun companies, Signal companies, R.A.S.C. Sctions, and the Medical and Veterinary Corps. Units of the Auxiliary Force are under the command of the local military authority, and the latter has the power of calling them out for service locally in a case of emergency. Their role is to assist in home defence. Training is carried on throughout the year. Pay at a fixed rate is given for each day's training and, on completion of the scheduled period of annual training, every enrolled member of the force is entitled to a certain bonus. Men enrol in the Auxiliary Force for an indefinite period. An enrolled person is entitled to claim his discharge on the completion of four years' service or on attaining the age of 45 years. Till then he can only be discharged on the recommendation of the advisory committee of the area.

The duties connected with the Defence Light Sections at Calcutta, Bombay, Karachi and Rangoon are performed by the Field Companies R. E. (A. F. I.) at those stations, assisted by Indian ranks of Sapper and Miner Units.

Indian Territorial Force.

The Territorial Force is one of the several aspects of the Indianisation of the military services. The force is intended to cater, amongst other things, for the military aspirations of those classes of the population to whom military service has not hitherto been a hereditary profession. It is intended, at the same time, to be a second line to and a source of reinforcement for the regular Indian army. Membership of the force for this latter reason carries with it a liability for something more than purely local service or home defence. It may, in certain circumstances, involve service overseas. The force is the direct successor of the Indian section of the Indian Defence Force created during the war. It has been modelled on the old militia in England. The essence of its scheme of organisation consists in training men by means of annual embodiment for a short period in successive years. By this means Indian Territorial Force units can be given sufficient preliminary training in peace to enable them, after a comparatively short period of intensive training, to take their place by the side of regular units in war.

The Indian Territorial Force consists at present of three main categories, provincial battalions, urban units and the *university training corps units*. The last are recruited from the staff and students of Indian universities. They are trained all the year round, and are equipped with a permanent staff of British instructors. On ceasing to belong to a university, a member of the corps is discharged. In the case of the university training corps units it is not intended to enforce the liablity to render actual military service. Their purpose is mainly educative, to inculcate discipline and form character. But, incidentally, they are expected to be a source of supply of both officers and men for the provincial and urban units.

The members of the *provincial battalions* accept the full liability for service which has been mentioned. Seven such battalions were constituted in the first instance. The number is now eighteen and, though the unit establishment has not been completely filled in all cases, the movement has already achieved a greater degree of success than might have been anticipated at so early a stage. It is in contemplation to diversify and extend the scope of the force by constituting some ancillary units. Although for the present the infantry arm only has been

created with the addition of the I.T.F. Medical Branch, the force by law may include every other army service.

Men enrol in the provincial battalions for a period of six years, the period being reduced to four years in certain cases. On the completion of the first period they can re-enrol voluntarily for further specified periods. During his first year, every man does preliminary training for one calendar month and during every year he receives one month's periodical training. Members of *urban units* have only a provincial liability. 4 such units were constituted in 1928 in Bombay, Madras, and the United Provinces, one of these being an entirely Parsi battalion. Members enrol for a period of 6 years and train all the year round. During his first year every man does 32 days' preliminary training, and in every subsequent year 16 days' periodical training.

The Indian State Forces.

The Indian State Forces, formerly designated "Imperial Service Troops," consist of the military forces raised and maintained by the Rulers of Indian States at their own expense and for State service. It has been the custom in emergency for State troops to be lent to the Government of India, and the Government of India have on many occasions received military assistance of great value from this source. But the rendering of such aid is entirely at the discretion of the Ruling Princes and Chiefs. Government, on the other hand, provide permanently a staff of British officers, termed "Military Advisers and Assistant Military Advisers," to assist and advise the Ruling Princes in organising and training the troops of their States.

After the war had ended, the Indian States, like the Government of India, undertook a military reorganisation, which in a number of cases, has already been carried out. The principal feature of the new arrangements, as adopted more or less generally, is that in future the Indian State Forces should be composed of three categories of troops, namely:

Class A.—Troops in this class are organised on the present-day Indian Army system and establishments, and, with some exceptions, are armed with the same weapons as corresponding units of the regular Indian Army.

Class B.—These troops consist of units which are, in most cases, little inferior in training and discipline to troops of Class A; but they are not organised on present-day Indian Army establishments. They have, as a rule, retained the system of the pre-war formations. Their standard of armament is pitched lower than that of Class A troops.

Class C.—These troops consist in the main of militia formations, which are not permanently embodied. The standard of training, discipline, and armament, prescribed for this class, is generally lower than the standard prescribed for Class B troops.

The authorized and actual strength of the Indian State Forces on the 1st October 1927 amounted to—

	Authorized strength.	Actual strength on the 1st October 1927.
Artillery	1,481	1,370
Cavalry	9,714	8,362
Infantry	30,046	23,322
Camel Corps	465	460
Motor Machine Gun Sections	75	24
Sappers	1,178	990
Transport Corps ..	1,611	1,530
Grand total ..	44,570	36,058

Officers.

There are two main categories of officers in the Indian Army; those holding the King's Commission and those holding the Viceroy's Commission. The latter are all Indians, apart from the Gurkha officers of Gurkha battalions, and have a limited status and power of command, both of which are regulated by the Indian Army Act and the rules made thereunder. Until recent years Indians were not eligible for King's Commissions, but a limited number can now obtain such commissions, on entry into the Indian Army through the Royal Military College, Sandhurst and the Royal Military Academy, Woolwich.

King's Commissioned Officers for the Indian Army are obtained from two main sources: from among the cadets who pass through the Royal Military College, Sandhurst, and by the transfer to the Indian Army of Officers belonging to British units. The former is the principal channel of recruitment; the latter being only resorted to when, owing to abnormal wastage or for some other special reason, requirements cannot be complete by means of cadets from Sandhurst. A third source is from among University candidates. When a cadet has qualified at Sandhurst and has received his commission, he becomes, in the first instance, an officer of the Unattached List, and is posted for a period of one year to a British battalion or regiment in India, where he receives a preliminary training in his military duties. At the end of the year, he is posted as a squadron or company officer to a regiment or battalion of the Indian Army. Administrative services and departments of the army draw their officers from combatant units, as it has hitherto been regarded as essential that every officer should, in the first instance, receive a thorough grounding in combatant

duties, and acquire at first hand an intimate knowledge of the requirements of the combatant arms.

The promotion in rank of King's commissioned officers of the Indian Army is regulated by a time-scale up to the rank of Lieutenant-Colonel, but is subject also to certain professional examinations and tests being successfully passed. The rank of Lieutenant-Colonel is in normal course, attained at 26 years' service; promotion beyond this rank is determined by selection.

Indian Officers.—One of the most momentous decisions of the Great War, so far as the Indian Army is concerned, was that which rendered Indians eligible to hold the King's commission in the army. It was proposed that King's commissions should be obtainable by Indian gentlemen in the following three ways: (1) By qualifying as a cadet through the Royal Military College, Sandhurst; (2) by the selection of specially capable and deserving Indian officers or non-commissioned officers of Indian regiments who had either been promoted from the ranks or joined their regiments on direct appointment as jemadar; (3) by the bestowal of honorary King's commissions on Indian officers who had rendered distinguished service, but whose age and lack of education precluded their being granted the full King's commission. A number of honorary King's commissions are still granted annually to a limited number of Viceroy's commissioned officers of the class described in the third category mentioned above. The second of the sources of selection mentioned has since been almost entirely abandoned for the reason that a Viceroy's commissioned officer of this class cannot, as a practical matter, hope to have a normal career as a King's commissioned officer. It is the first of the three avenues of selection mentioned which gives the fullest opportunity to the Indian of satisfying a military ambition and of enjoying a military career on terms of absolute equality with the British officer, who, as a general rule, also enters the army by qualifying at Sandhurst. It was decided that, in the first instance, ten vacancies at Sandhurst should be reserved annually for Indian cadets.

A further measure adopted by the Government was the establishment of the Prince of Wales' Royal Indian Military College at Dehra Dun, a Government institution for the preliminary education of Indians who desire to qualify for the King's commission in the army through the Royal Military College, Sandhurst The arrangements so far made enable a maximum of 70 boys to be in residence at the college at any one time, and the normal course of education is planned to occupy six years. These dispositions will render it possible to provide from Dehra Dun sufficient candidates to fill the ten vacancies at Sandhurst which are at present allotted annually to Indians. In February 1923, it was decided that eight units of the Indian Army should be completely Indianized. The units selected for Indianization were: 7th Light Cavalry; 16th Light Cavalry; 2/1st Madras Pioneers; 4/19th Hyderabad Regiment; 5th Royal Battalion, 5th Mahratta Light Infantry; 1/7th Rajput Regiment (Q. V. O. L. I.); 1/14th Punjab Regiment; 2/1st Punjab Regiment.

Training Institutions.

The following institutions exist in India for the higher training of military personnel and for the education of instructors for units:—

Staff College, Quetta.
Senior Officers' School, Belgaum.
School of Artillery, Kakul.
Equitation School, Saugor.
Small Arms School, Pachmarhi (*a*).
Army School of Physical Training, Ambala.
Machine Gun School, Ahmednagar (*a*).
Army Signal School, Poona.
Royal Tank Corps School, Ahmednagar.
Army School of Education, Belgaum.
Army School of Cookery, Poona.
Army Veterinary Schools, Ambala and Poona.
Indian Army Service Corps Training Establishment, Rawalpindi.

(*a*) Following the procedure adopted at Home, the Small Arms and Machine Guns Schools were amalgamated in February 1927, the two Schools are not yet located in one place. Hence they are shown as two Schools above, the one for Small Arms at Pachmarhi and that for Machine Guns at Ahmednagar.

The object of these Schools is to ensure to all the units throughout the army a constant supply of officers, warrant officers, non-commissioned officers and men, provided with a thorough up-to-date knowledge of various technical subjects, and with the ability to pass on this knowledge.

The King George Royal Indian Military Schools at Jhelum and Jullundur also exist for the education of the sons of Indian soldiers with a view to their finding a career in the Indian Army, and the Prince of Wales' Royal Indian Military College at Dehra Dun exists for the preliminary education of Indians who desire to qualify for the King's Commission in the Army through Sandhurst.

Army in India Reserve of Officers.—Previous to the Great War there had been what was called the Indian Army Reserve of Officers, a body of trained officers available to replace casualties in the Indian Army. The war proved that for many reasons this reserve did not meet the requirements and in 1922 the Army in India Reserve of Officers was constituted.

The revised Regulations for the A. I. R. O. published in 1926, had the effect of stimulating recruitment. They provide that the following gentlemen may be granted commission in the Reserve:—

(1) Officers who having held King's commissions and retired from H. M.'s forces, are not liable for further service.

(2) Officials, other than Military officers, serving under the Government of India or a local Government.

(3) Private gentlemen residing in India, possessing the requisite qualifications and previous training.

The Reserve comprises each arm and branch of the Army and the officers are posted to definite branches and units.

All officers are required to undergo periodical training up to a maximum of 30 days a year and receive pay and allowances admissible to regular officers of the same rank and arm of the service, during training.

Members of the Auxiliary Force, India, may become "officers designate" for the grant of commissions in the A. I. R. O., upon the calling to army service of that reserve.

Officers and officers designate receive Rs. 200 annually as a retaining fee, and an outfit allowance of Rs. 400, on joining.

The strength of the Reserve on the 1st September 1928 was 1254.

Recruitment for the Reserve has been extended to Ceylon, the number to be commissioned in Ceylon being limited to 50.

The Fighting Races.—The fighting classes that contribute to the composition of the Indian Army have hitherto been drawn mainly from the north of India, but the experiences of the great war have caused some modifications in the opinions previously held as to the relative value of these and other fighting men. The numbers of the various castes and tribes enlisted in the Army have since the war undergone fluctuations, and it is not possible at present to give exact information as to their proportions. Previous to the war the Sikhs contributed very large numbers both to the cavalry and infantry, and the contribution of the Gurkhas was also large; it is probable that these classes preserve their preponderance. The Sikhs, who inhabit the Punjab originated in a sect founded near Lahore by a peasant in the early part of the sixteenth century and in the course of a hundred years grew into a formidable militant power. Muhammadans of various races contribute a still larger proportion to both the cavalry and infantry. These are drawn both from the north and the south of India, as well as from beyond the Frontier. They are all excellent fighting men, hardy and warlike, who have furnished sodiers to all the great powers of India for many hundreds of years. As cavalry the Muhammadans are perhaps unequalled by any other race in the East, being good horsemen and expert men-at-arms.

Next in point of numbers are the Gurkhas of Nepal, of whom there are twenty complete battalions, which during the war were considerably increased. As fighters in the hills they are unsurpassed even by the Pathans in the North-West Frontier, but the Garhwalis and Kumaonis are equally good mountaineers.

The professional military caste of India from time immemorial has been the Rajput, inhabiting not only Rajputana but the United Provinces and Oudh. Of fine physique and martial bearing, these warriors of Hindustan formed the backbone of the old Bengal Army, and have sustained the English flag in every campaign in the East. Their high caste and consequent prejudices in no respect interfere with their martial instincts and efficiency in war. They furnish many battalions. The Garhwalis are Hill Rajputs, good and gallant soldiers, who have proved themselves equal to any other troops on the field of battle and have established an imperishable record in the war both in Europe and in the East. The two battalions which were all we had in 1914 have since been added to. The Jats are a fine and warlike race of Hindus found in the Delhi and Rohtak districts and adjoining territory. It was these people who held out so bravely at Bharatpur and repelled Lord Lake's army in 1805. They have proved themselves good soldiers on the battlefields of Europe. Dogras are good and steady soldiers found in the hilly districts of the Punjab. They fought well in Flanders and in Mesopotamia.

Among those who have rendered signal and gallant service in the war are the Mahrattas of the Deccan and the Konkan, who have revived the reputation held by their race in the days of Shivaji, the founder of the Mahratta Empire. It is probable that their proved efficiency in war will lead to their recruitment in larger numbers in future.

In addition to the castes that have been mentioned, other caste men from the south and other parts of India have filled the ranks of the Pioneer regiments and Sappers and Miners, and done their duty well in every campaign in which they have been engaged.

During the war the Victoria Cross was awarded for conspicuous gallantry to 2 Indian officers, 4 non-commissioned officers and 6 other ranks of the Indian Army.

The Military Cross was awarded to 96 Indian Officers for distinguished service rendered during the Great War and to 3 Indian Officers for service in Waziristan.

A large number of Indian Officers and men were also granted Foreign decorations.

Summary of India's Effort in the War.—In a despatch by the Commander-in-Chief published in July, 1919, the whole operations of the Indian Army during the war are reviewed. His Excellency gives in it the following figures showing the extent of India's contribution in terms of men. On the outbreak of war, the combatant strength of the Indian Army, including reservists, was 194,000 Indian ranks; enlistments during the war for all branches of the service amounted to 791,000, making a total combatant contribution of 985,000. Of this number, 552,000 were sent overseas. As regards non-combatants, the pre-war strength was 45,000; an additional 427,000 were enrolled during the war and 391,000 were sent overseas. The total contribution of Indian personnel has thus been 1,457,000, of whom 943,000 have served overseas. Casualties amounted to 106,594, which include 36,696 deaths from all causes. The number of animals sent overseas was 175,000.*

* For a record of the services of the Indian Army in the War, see "The Indian Year Book" of 1920, p. 152, *et seq.*

Effectives, 1928.

—	Officers with King's Commissions.	British other ranks.	Indian Officers with Viceroy's Commissions.	Indian other ranks.	Clerks and other civilians.	Followers.	Indian reservists.
1	2	3	4	5	6	7	8
I. Combatant Services (includes Cavalry, Artillery Engineers, Pioneers, Infantry, Signal Service and Tank Corps.) ..	4,133	56,074	3,498	1,33,886	(*a*)	21,335	35,715
II. Staff (inclusive of personnel of Administrative Services.) ..	559	503	11	131	1,396	517	..
III. Training Establishments (inclusive of personnel of Departmental Corps.)	120	153	9	105	64	517	..
IV. Educational Establishments ..	65	166	35	34	259	304	..
V. Indian Army Service Corps (*Numbers taken after deducting the numbers included in items I, II, and III*) ..	390	861	284	16,461	1,160	5,703	5,561
VI. Indian Army Ordnance Corps. (*Numbers taken after deducting the numbers included in item II.*)	70	559	6	1,755	584	172	..
VII. Medical Services (*Numbers taken after deducting the numbers included in item II.*) ..	901	862	718	4,323	56	4,916	1,400
VIII. Veterinary Services (*Numbers taken after deducting the numbers included in item II.*)	40	4	104	552	43	90	..
IX. Remount Services. (*Numbers taken after deducting the numbers included in item II.*)	35	24	26	197	47	3,679	..
X. Miscellaneous Establishments (inclusive of Military Accounts Department) ..	288	196	142	622	5,712	2,565	..
XI. Auxiliary and Territorial Forces (Permanent Establishments)	175	416	..	..	12	5	..
Total ..	6,774	59,828	4,833	1,58,063	9,333	39,619	42,876

(*a*) Included in column 7.

Budget Expenditure on National Defence.

A part of the Defence expenditure on the Indian Budget is incurred in England, the nature of such expenditure being indicated in the detailed Tables of Army, Marine and Military Engineer Services expenditure. This expenditure is met by transfer of funds from India. From the 1st April 1920 to the 31st March 1927, the accounts were prepared on the basis of the rate of 2 per rupee for the conversion of English sterling transaction into rupees. From the 1st April 1927 the accounts are being prepared at the standard rate of 1s. 6d. per rupee.

As a rule, the receipts collected by the various departments are not set off against expenditure as appropriations in aid, but are shown separately on the receipts side of the budget. This is especially the case with the receipts of the Military Departments, which amount to considerable sums.

The Provincial Governments incur no expenditure for Military purposes.

SUMMARY OF DEFENCE EXPENDITURE (Gross.)

Table 1.

	1926-27. Closed Accounts.	1927-28. Revised Estimates.	1928-29. Budget estimates as passed.
	Rupees (000's omitted.)		
Army	55,84,71	51,17,33	52,82,93
Marine	65,33	83,36	85,19
Military Works	4,41,60	4,40,15	4,26,00
Total .	60,91,64	56,40,84	58,04,12

NOTES.—(1) This summary includes the cost of the Royal Air Force, which is included in the Army Estimates, and also the expenditure on non-effective services, but does not include debt services.

(2) All Expenditure for Military purposes incurred in the United Kingdom by the Indian Government, as also all contibutions to the Imperial Government for these purposes, are included in the above figures.

ANALYSIS OF DEFENCE EXPENDITURE.

1. The following table gives the main items of *Army* Expenditure, (gross) shown for India and England separately :—

Table 2.

	1926-27. Closed Accounts.	1927-28. Revised Estimates.	1928-29. Budgets Estimate.
INDIA.	Rupees (000's omitted).		
A. *Standing Army :*			
(1) Effective Services :			
Maintenance of the Standing Army ..			15,79,37
Administrative services.			6,70,62
Manufacturing establishments			2,73,29
Army Headquarters, Staff of Commands, etc.			2,00,97
Purchase and sale of stores, equipment and animals			5,30,94
Special Services			14
Transportation, Conservancy, anti-malarial measures, hot weather establishments and miscellaneous			2,25,12
Lump cut for probable underspending ..			—34,09
Total Effective Services ..			34,46,65
(2) Non-effective Services :			
Non-effective charges			3,45,53
B. *Auxiliary and Territorial Forces :*			
Effective			93,82
C. *Royal Air Force :*			
Effective			1,26,74
Non-effective			4
Total : India:			
Effective	41,53,24	35,72,49	36,67,01
Non-effective	4,64,58	3,46,54	3,45,57
Total ..	46,17,82	39,19,03	40,12,58

Table 2—contd.

—	1926-27. Closed Accounts.	1927-28. Revised Estimates.	1928-29. Budget Estimates.
	(Rupees 000's omitted)		
ENGLAND.			
1. *Standing Army:*			
(1) Effective Services:			
Maintenance of the Standing Army ..			3,77,51
Administrative Services			51,71
Manufacturing establishments			90,38
Army Headquarters, Staff of Commands, etc.			9,87
Purchase and sale of stores, equipment and animals			77,40
Special Services			..
Transportation, Conservancy, anti-malarial measures, hot weather establishments and miscellaneous			76,67
Total Effective Services ..			6,77,54
(2) Non-effective Services			4,91,52
B. *Royal Air Force* :			
Effective			99,43
Non-effective			1,86
Total: England	9,66,88	11,98,30	12,70,35
Total Army Expenditure—			
Effective	47,72,62	42,84,44	44,43,98
Non-effective	8,12,09	8,32,89	8,38,95
Grand Total ..	51,17,33	55,03,63	52,82,93

The amounts expended in England on effective services consist of such charges as payments to the War Office and Air Ministry in London in respect of British Forces serving in India, the transport to India of these forces, and payments on account of stores taken to India by British Forces, educational establishments in England for Indian Services, leave pay of Indian and British service Officers on the Indian Establishments, purchase of imported stores, etc. The expenditure on non-effective services consists of payments to the War Office in London for retired pay to British forces for services in India and to non-effective and retired officers of the Indian Service, and of various gratuities.

Of the sum of Rs. 551 millions allotted in the Budget for 1927-28 to meet the net expenditure on Military Services (*i.e.*, after deducting Receipts), Rs. 582 millions will be available for expenditure under the heading "Army," made up of Rs. 385·8 millions for expenditure in India and Rs. 122·4 millions in England.

The gross working expenses of military establishments, such as bakeries, pasture and dairy farms, army clothing factories, and storage depots, army ordnance factories and base mechanical transport workshops are included in the Budget.

The division of expenditure on *Military Engineer Services* between India and England is shown below :

—	1926-27. Closed Accounts.	1927-28. Revised Estimates.	1928-29. Budget Estimates.
	(Rupees 000's omitted)		
India (including exchange)	4,37,58	4,40,95	4,31,74
England	4,02	—80	4,26
Total ..	4,41,60	4,40,15	4,36,00

The Strength of the Army.

BRITISH TROOPS.

The following table gives the average strength of British troops, and the main facts as regards their health in 1925 with comparative figures for the quinquennial period 1910-14 and for the years 1915 to 1927 :—

Period.	Average strength.	Admissions.	Deaths.	Invalids sent home.	Average constantly sick.
1910-14 average	69,440	39,389	303	488	2,094·57
1915	44,891	36,952	267	889	1,754·19
1916	60,737	46,892	397	1,343	2,414·56
1917	80,825	62,372	390	1,337	3,686·45
1918	87,982	90,637	1,424	2,007	5,286·61
1919	56,561	54,982	438	4,324	3,245·84
1920	57,332	61,429	385	2,314	3,488·08
1921	58,681	60,515	408	749	3,070·04
1922	60,166	37,836	284	714	1,902·32
1923	63,139	37,595	237	979	1,793·31
1924	58,614	38,569	246	879	1,857·95
1925	57,378	36,069	166	997	1,750·19
1926	56,798	36,893	171	910	1,758·60
1927	55,632	34,666	149	829	1,654·22

INDIAN TROOPS.

The average strength of Indian troops, including those on duty in China and Nepal and other stations outside India in 1926 was 135,146.

The following table gives below the actuals and ratios of sickness, deaths, and invaliding for the quinquennial period 1910-14 and 1915-19 and for the years 1920 to 1927 inclusive :—

Period.	Average strength.	Admissions.	Deaths.	Invalids.	Average constantly sick.	Ratio per 1,000 of strength.			
						Admissions.	Deaths.	Invalids.	Average constantly sick.
1910-14 (average)	130,261	71,213	573	699	2,662	544·6	4·39	5·4	20·7
1915-19 (average)	204,298	161,028	3,435	4,829	7,792	788·2	16·81	23·6	38·1
1920 ..	216,445	164,987	2,124	4,564	9,265	762·3	9·81	21·1	42·8
1921* ..	175,384	119,215	1,782	3,638	6,031	679·7	10·16	20·7	34·4
1922* ..	147,840	77,468	1,014	2,659	3,639	524·0	6·86	18·0	24·6
1923* ..	143,234	66,847	856	2,328	2,955	466·7	5·98	16·3	20·63
1924* ..	134,742	57,014	772	1,731	2,432	423·1	5·73	12·8	18·05
1925* ..	136,473	48,691	547	1,712	2,053	356·8	4·01	12·5	15·04
1926* ..	135,146	52,517	507	1,569	2,082	388·6	3·75	11·6	15·41
1927 ..	133,200	47,054	442	1,842	1,972	358.6	3·37	12·8	15·03

THE EAST INDIES SQUADRON.

Since 1903 a squadron of the Royal Navy, known as the East Indies Squadron, has been maintained in Indian waters. It has naturally varied in strength from time to time, and of late years in particular there have been several changes in its composition, the most recent being in the direction of strengthening it, owing to the disappearance of strength in the other squadrons of the Eastern Fleet. In 1903 the squadron consisted of one second class and three smaller cruisers and four sloops or gunboats. In 1906, when the policy of withdrawal from Eastern waters was inaugurated, it consisted of two second class and two third class cruisers, and remained at this strength until 1910: when one second class cruiser was withdrawn and two smaller vessels substituted, and three cruisers were lent from the Mediterranean to assist in the suppression of the arms traffic in the Gulf. By 1913 the position of the East Indies squadron had considerably improved. The battleship Swift-

sure had taken the place of the second class cruiser which had been flagship, and a modern second class cruiser replaced the Perseus.

The Squadron in 1929.—The composition of the Squadron (Fourth Cruiser Squadron) is as follows:—

"Effingham" (Flag), Cruiser: 9,770 tons "Emerald," Cruiser, 7,550 tons; "Enterprise," Cruiser: 7,550. Sloops "Crocus," "Cyclamen," and "Lupin". Special Service vessel "Triad" (Senior Naval Officer, Persian Gulf.) Survey Ship "Ormonde."

The proportion of contributions from the overseas Dominions towards naval expenditure is shown in the following table issued with the last Navy Estimates that gave details :—

Received from	Nature of Service.	Total.
		£
India ..	Maintenance of His Majesty's Ships in Indian Waters..	100,000
	Indian Troop Service (on account of work performed by the Admiralty)	3,400
	Repayment on account of services rendered by His Majesty's Ships engaged in the suppression of the Arms Traffic in the Persian Gulf	64,000
Australian Commonwealth Dominion of Canada.	Contributions on account of liability for Retired Pay of Officers and Pensions of Men lent from the Royal Navy.	10,800
Australian Commonwealth.	Survey of the N. W. Coast of Australia	7,500
Do.	Maintenance of an Australasian Squadron and of a branch of the Royal Navy Reserve..	41,600
Dominion of New Zealand.	Maintenance of an Australasian Squadron and of the Imperial Navy generally, also of a branch of the Royal Naval Reserve	100,000
Union of South Africa ..	General maintenance of the Navy	85,000
Newfoundland ..	Maintenance of a branch of the Royal Naval Reserve ..	3,000
	Total ..	415,800

India's Marine Expenditure.

Since 1869 India has paid a contribution of varying amounts to the Imperial Government in consideration of services performed by the Royal Navy. Under existing arrangements which date from 1896-7, the subsidy of £100,000 a year is paid for the upkeep of certain ships of the East India Squadron, which may not be employed beyond prescribed limits, except with the consent of the Government of India. The expenditure amounts to nearly £400,000 annually.

The question of a new distribution of the burden of the cost of Imperial Naval defence was discussed at the Imperial Conference in London in October—November 1926. The matter appeared to be one on which the delegates could form no new decision without further consultations in their respective capitals and no resolution was passed.

The Royal Indian Marine is being reorganised so as to form the nucleus of an Indian Navy. The R. I. M. Ship "Dalhousie" has been reconditioned for use as a Depot Ship. Three of the R. I. M. Ships have been or are being reconditioned for use as sloops of war in the R. I. M. Negotiations are in progress with the Admiralty for the provision of a fourth sloop for the new service. The necessary legislation in Parliament has been undertaken and completed and the consequential Indian Legislation in regard to the discipline of the new force will be introduced in the Indian Legislature as soon as possible.

ROYAL INDIAN MARINE.

The Royal Indian Marine (The Sea Service under the Government of India) traces its origin so far back as 1612 when the East India Company stationed at Surat found that it was necessary to provide themselves with armed vessels to protect their commerce and settlements from the Dutch or Portuguese and from the pirates which infested the Indian coasts. The first two ships, the Dragon and Hoseander (or Osiander), were despatched from England in 1612 under a Captain Best, and since those days under slightly varying titles and of various strengths the Government in India have always maintained a sea service.

The periods and titles have been as follows:—

Hon. E. I. Co.'s Marine	..	1612—1686
Bombay ,,	..	1686—1830
Indian Navy ,,	..	1830—1863
Bombay Marine ..	..	1863—1877
H. M. Indian Marine ..	..	1877—1892
Royal Indian Marine ..		1892, Present day.

The Marine has always been most closely connected with Bombay, and in 1668 when the E. India Co. took over Bombay, Captain Young of the Marine was appointed Deputy

Governor. From then until 1877 the Marine was under the Government of Bombay, and although from that date all the Marine Establishments were amalgamated into an Imperial Marine under the Government of India, Bombay has continued to be the headquarters and the official residence of the Director.

War Service of the Marine.

1612-1717 Continuous wars against Dutch, Portuguese and Pirates for supremacy of West Coast of India. 1744 War with France, capture of Chandernagore, and French ship Indienne. In 1756 Capture of Castle of Gheria. 1774 Mahratta War, capture of Tannah. Latter part of the eighteenth century, war with French and Dutch, Capture of Pondicherry, Trincomalee, Jafnapatam, Colombo, etc. 1801 Egyptian campaign under Sir Ralph Abercrombie. 1803 War with France. 1810 Taking of Mauritius and capture of French ship in Port Louis. Early part of the nineteenth century suppression of Jowasmi Pirates in the Persian Gulf. 1811 Conquest of Tara. 1813 Expedition against Sultan of Sambar. 1817-18 Mahratta War, capture of Forts at Severndroog. 1819 Expedition to exterminate piracy in the Persian Gulf. 1820 Capture of Mocha. 1821 Expedition against the Beni-koo-Ali Arabs. 1824-26 First Burma War. 1827 Blockade of Berbera and Somali Coast. 1835 Defeat of Beni Yas Pirater. 1838 Expedition to Afghanistan and capture of Karachi. 1838 Capture of Aden. 1840-42 War in China. 1843 Scinde War Battle of Meanee, capture of Hyderabad. 1845-46 Maori war in New Zealand. 1848-49 War in Punjab, siege of Mooltan. 1852 Second Burma War, Capture of Rangoon, Martaban, Bassein, Prome and Pegu. 1855 Persian War, capture of Bushire, Muhammerah and Ahwaz. 1856-57 War in China. 1857-59 The Indian Mutiny. 1859 Capture of the Island of Beyt. 1860 China War, Canton, Taku Forts, Fatshan and Pekin. 1871 Abyssinian War. 1882 Egyptian Campaign. 1885 Egyptian Campaign. 1885 Third Burma War. 1889 Chin-Lshai Expedition. 1896 Suakin Expedition. 1897 Expedition to Imtirbe, Mombassa E. Africa. 1899-1902 S. African War. 1900-01 Boxer Rebellion in China relief of Pekin, 1902-04 Somaliland Expedition, Suppression of Arms Traffic operations, Persian Gulf, 1912-14.

During the War 1914-1918 Royal Indian Marine Officers were employed on many and various duties. Royal Indian Marine Ships "DUFFERIN," "HARDINGE," "NORTHBROOK," "LAWRENCE," "DALHOUSIE" and "MINTO" had their guns mounted and served as Auxiliary Cruisers. Officers also served in the Royal Navy in the Grand Fleet, Mediterranean North Sea, North Red Sea and Caspian Sea Fleets.

In addition to transport duties in Indian Ports, Officers were sent to Marseilles, East Africa and Egypt for such duties, and on the entry of Turkey into the War were employed on duties towing and manning River Craft and Barges to and in Mesopotamia, and it was necessary to enlist a number of Temporary Officers, Warrant Officers and men to the numbers of approximately 240, 60 and 2,000 respectively for these and other duties.

When the War Office assumed full control of Operations in Mesopotamia a large number of Regular and Temporary Officers and men were seconded to the Royal Engineers and General Service respectively for duties in the Inland Water Transport which controlled all River Transport work in that country, and these officers held many important executive appointments in that unit.

The movements of all sea transports between India and the various theatres of War were controlled by Marine Officers.

Trawlers were built in the Bombay and Calcutta Dockyards and mine sweeping operations were carried out with these and launches off Bombay and elsewhere, the trawlers were also used for towing duties.

Retired Royal Indian Marine Officers were employed on naval transport duties in England and France, and also in very responsible positions with the Inland Water Transport in France.

Service in the War 1914-18.—The Royal Indian Marine, though a small Service compared with the Army and Navy, played a very active and conspicuous part in the European War. These are set out in detail in the Indian Year Book for 1922 and earlier editions (*q. v.* pp. 202 *et seq.*).

Personnel, 1928.

HEADQUARTERS STAFF.

Flag officer Commanding, Royal Indian Marine and P. N. T. O., East Indies.	Rear Admiral H. T. Walwyn, C.B., D.S.O.
Naval Secretary ..	Paymaster Commander E. A. Jolley, R. N.
Flag Lieutenant ..	Lieut. F. C. Hammond, R. I M.
Chief of the Staff, R. I. M., and Captain Supdt., R. I. M., Dockyard.	Captain H. Morland, R.I.M.
Commander of the Dockyard ..	Commander R. H. Garstin, O.B.E., R.I.M.
Squadron Minesweeping Officer ..	Lieut.-Comdr. M. R. T. Knight, R. N.
Squadron Gunnery Officer ..	Lieut.-Comdr. F. R. Holmstrom, R. N.
Squadron Signal Officer ..	Lieut. St. J. A. D. Garniss, R.I.M.
Officer-in-charge, Chart Depot ..	Lieut. E. C. Streatfeild-James, R.I.M. (Borne in "Investigator.")
Engineer Manager of the Dockyard ..	Engineer Captain W. A. Williams, R.I.M.
1st Assistant to the Engineer Manager of the Dockyard. ..	Engineer Lieut.-Comdr. T. Kerr, D.S.C., R.I.M.
2nd Assistant to the Engineer Manager of the Dockyard. ..	Engineer Lieut.-Comdr. J. H. Mackay, R.I.M.

Marine Store Officer .. Engineer Commander W. W. Collins, R.I.M.
Financial Adviser to the Flag Officer Comdg. R.I.M. .. R. E. Odling, Esq.
Chief Superintendent to the Flag Officer Comdg. R.I.M. .. E. Osborne Carey, Esq.

MARINE TRANSPORT STAFF.

Divisional Marine Transport Officer, Bombay .. Commander B. Gordon.
Asst. Marine Transport Officer, 1st Grade, Bombay .. Lieut.-Comdr. G. M. Osborne-Smith.

CIVILIAN GAZETTED OFFICERS.

Constructor .. W. J. Kenshett, Esq. (Leave.)
W. G. J. Francis, Esq. (Offg.)

OFFICERS.

Captains	9
Commanders	18
Lieutenant-Commanders, Lieutenants, Sub-Lieutenants and Midshipmen	51
Engineer-Captain	1
Engineer-Commanders	7
Engineer-Lieutenant-Commanders, Engineer-Lieutenants and Engineer-Sub-Lieutenants	42
WARRANT OFFICERS.	
Boatswains	22
Warrant Writers	12

PETTY OFFICERS AND MEN.

Who are mostly recruited from the Ratnagiri District of the Bombay Presidency.

SHIPS.

Sloop Minesweeping	H. M. I. S. Clive	2,100 tons	2,422	Horse Power.
Sloop	,, Cornwallis	1,740 ,,	2,700	,,
Sloop Minesweeping	,, Lawrence	1,412 ,,	2,020	,,
Surveying Vessel	,, Investigator	1,355 ,,	1,500	,,
,,	,, Palinurus	538 ,,	486	,,
Depot Ship	,, Dalhousie	1,650 ,,		
Patrol Vessel	,, Pathan	832 ,,	3,500	S. H. P.
,,	,, Baluchi	755 ,,	3,500	,,

In addition to the above there are 23 vessels composed of steam trawlers, service launches, target towing tugs, distributed at Bombay, Calcutta, Aden and Karachi.

Dockyards.

There were two Royal Indian Marine Dockyards at Bombay and at Calcutta, the former being the more important. The one at Calcutta has been closed. There are 5 graving docks and a wet basin at Bombay, together with factories.

Medical Staff.

Marine Surgeon, Lieutenant-Colonel A. N. Thomas, D.S.O., I.M.S.

Warrant Officer in Medical Charge, Dockyard Dispensary, Assistant Surgeon J. B. D'Sousa, I.M.D.

R. I. M. Warrant Officers.

Warrant Master-at-Arms, Dockyard Police, Mr. C. Mahon, Boatswain.

Boatswain-in-charge R I.M. Ordnance Depot, Mr. P. O' Hara, Boatswain.

Asst. Warrant Master-at-Arms, Dockyard Police, Mr G. Mattison, Boatswain.

Boatswain of the Dockyard, Mr. A. H. Lovett, M.B.E. Boatswain.

Police Boatswain, Mr. Sk. Kadir Sk. Jaino Boatswain, R. I. M.

Police Boatswain, Mr. Sk. Mahamad Sk. Bhicoo, Boatswain, R.I.M.

Appointments.

In addition to the regular appointments in the ships of the Royal Indian Marine, and in the R. I. M. Dockyard, the following appointments under local Governments are held by the officers of the Royal Indian Marine:—

BOMBAY.

Port Officer; Assistant Port Officer, Principal Engineer and Ship Surveyor and 2nd 3rd and 4th Engineers and Ship Surveyors to the Government of Bombay.

CALCUTTA.

Port Officer, Deputy Port Officer and Deputy Shipping Master, Principal Engineer and Ship Surveyor, 2nd, 3rd and 4th Engineers and Ship Surveyors to the Government of Bengal.

NARAYANGANJ (Bengal).

Engineer Superintendent, Government Dockyard.

BURMA.

Principal Port Officer, Burma, 1st and 2nd Assistant Port Officers, Rangoon. Principal Engineer and Ship Surveyor and Superintending Engineer to the Government of Burma, Assistant to the Principal Engineer and Ship Surveyor and Superintending Engineer to the Government of Burma and Engineer Superintendent of Government Vessels in Lower Burma.

MANDALAY.

Superintending Engineer.
Port Officer.

BASSEIN.

Port Officer.

MOULMEIN.

Port Officer.

CHITTAGONG.

Port Officer and Engineer and Ship Surveyor.

MADRAS.

Presidency Port Officer and Deputy Conservator of the Port.

ADEN.

Port Officer.

KARACHI.

Port Officer, Assistant Marine Transport Officers and Engineer and Ship Surveyor.

PORT BLAIR.

Engineer and Harbour Master.

THE ROYAL INDIAN NAVY.

The official announcement of the proposal to reconstruct the Royal Indian Marine as a Government department, to be called the Royal Indian Navy, was made by the Viceroy in the Council of State in February, 1926. He said that the creation of an Indian Navy had been under the consideration of the Government of India for some time past, and the intention of Government to take measures was strengthened by the recommendations of the Mercantile Marine Committee to reorganise the Royal Indian Marine on the lines of a combatant naval service. After consulting several naval experts the Government of India appointed a committee to formulate definite proposals.

The following were the members of the Committee: President.—General Lord Rawlinson, Commander-in-Chief, India; Members.—His Excellency Rear-Admiral (now Vice-Admiral) H. W. Richmond, Commander-in-Chief, His Majesty's ships and vessels, East Indies station; Sir B. N. Mitra, member of the Council of the Governor-General of India; Mr. E. Burdon, Secretary to the Government of India, Marine Department; Capt. E. J. Headlam, Director of the Royal Indian Marine.

The Committee met at Delhi during February 1925 and prepared their report which was approved in draft form by the late Lord Rawlinson before his death in March 1925. It stated generally: "The scope of the task entrusted to us is to draw up a scheme for the purpose of putting into effect a policy defined in the following formula: 'The reconstruction of the Royal Indian Marine as a combatant force to enable India to enter upon the first stage of her own naval development, and ultimately to undertake her own naval defence.'

Our **terms of reference** arranged for convenience in the order in which we shall deal with them are as follows:—

To prepare a scheme for the reorganization of the Royal Indian Marine so as to form the nucleus of an Indian Navy with special reference to (1) the functions to be ultimately performed by the Indian Navy and the methods of employment with a view to its undertaking those functions. (2) The number and class of vessels that can be maintained with available budget allotment. (3) Recruitment, strength, training and conditions of service of personnel. (4) Relations between the higher command of the Indian Navy, the Government of India and the Commander-in-Chief, East Indies, including the proposed employment of a Chief, Naval Staff, India. (5) Provision for and maintenance of vessels including the continuance or abolition of the Royal Indian Marine Dockyard."

A Sea-going Force.—The Committee observes that by far the most important aspect of the new force in its early stages will be its duty as a training squadron. The new personnel will need to be thoroughly trained in gunnery, mine sweeping, harbour defence and seamanship. In this connection we cannot insist too strongly on ships of the Indian Navy becoming from the first a sea-going force. Efficiency and enthusiasm alike will melt away if the new navy remains in port and practises nothing but harbour defence. A valuable service which we think that the Indian navy should be able to undertake in the near future will be the responsibility for policing the Persian Gulf in peace time, by which means the three vessels maintained in those waters by the Imperial Government will be set free of other duties at present performed by the Royal Indian Marine. We consider that the Marine survey should be retained, as its work in peace and war is essential for fighting sea service. Control of station ship at Aden, Port Blair, Rangoon and the Perian Gulf, to attend to the conveyance of corps and officials and to supervise the work of lighting and buoying in adjacent waters should not be a function of the new navy. Retention of these responsibilities would not be, in our opinion, compatible with development of a fighting force. The work of carrying troops can be contracted for commercially at rates which could hardly fail to be cheaper than existing arrangements. The new service should also be responsible for marine transport at present carried out by the Royal Indian Marine. The cost of storage and maintenance in this connection will be a charge against the Indian Navy.

Peace Time Functions.—The functions of the new Indian Navy in peace time will therefore be as follows: (*a*) Training of personnel for service in war; (*b*) Services required by the Indian Government in the Indian Ocean and Persian Gulf; (*c*) organization of the naval defences at the ports which are under the control of the Indian Government; (*d*) survey work in the Indian Ocean; (*e*) Marine transport work for the Government of India.

We recommend that in accordance with its new functions the service should be known as the Royal Indian Navy and should fly the White Ensign, which is the recognised flag of the naval fighting forces of the Empire.

As regards the number and class of vessels the Committee says: "On the assumption that these will be the functions of the Indian Navy we consider that a squadron of four sloops, two patrol craft vessels, four trawlers and two survey ships, together with one depot ship, as already suggested, would suffice to begin with."

The Committee estimate that the net **annual cost** of maintaining such a force would amount at first approximately to Rs. 63 lakhs. This figure is exclusive of the following items: (1) Rs. 12,50,000 cost of lighting and station ships which should be met from lighting fees and debited to other departments. At present two lakhs of this expenditure is debited to political estimates and the remaining ten and a half lakhs to marine estimates. (2) Rs. 4,00,000 for military launches which will be included in military estimates. (3) Rs. 1,14,000 on account of transport establishment, hitherto debited to His Majesty's Government. (4) Pension charges for ratings which will be a negligible figure for the first few years.

The Committee then refer to the estimates of the last two under marine department and observe that, taking the present cost of the Royal Indian Marine to be an average of the years 1924-25 and 1925-26 the annual cost of the proposed forces would compare as follows:

Royal Indian Marine total net cost, Rs. 51,62,000.

Net annual cost of Indian Navy, Rs. 62,60,000.

The cost on lighting and station ships and military launches would remain the same, namely, Rs. 16,50,000. Thus the excess of the annual cost in respect of the Indian Navy over that of the Royal Indian Marine would be Rs. 10,98,000. This excess, however, is likely to be reduced to a considerable extent by the leasing of dockyards and still further if, as is contemplated, the Government of India institute a system for the levy of fees for lighting on shipping companies.

Apart from recurring expenditure the Committee estimate that there will be initial expenses, assuming that new sloops will be provided by the Home Government on loan to the Indian Navy costing nine lakhs.

The Establishment.—The following establishment of officers and warrant officers will be required:—Flag-Officer Commanding, 1; Captains, 9; Commanders, 18; Lt.-Commanders, Lieuts. and Sub-Lieuts., 48; Midshipmen, 3; Boatswains, 22; Engineer Capt., 1; Engineer Commanders, 7; Engineer Lieut.-Commanders, Engineer Lieut., and Engineer Sub-Lieuts. 42; Assistant Surgeons, 10; Clerks 12.

The figures for the executive and engineer officers include provision for the following port appointments at Calcutta, Rangoon, Madras, Bombay, Karachi and Aden:—Captains, 5; Commanders, 5; Lieut.-Commander, 1; Engineer Commanders, 3; Engineer Lieut.-Commanders, 10; Boatswain, 1.

Commissions for Indians.—The nature of the Commissions to be granted to officers in the Indian Navy is of importance. We recommend that King's Commissions similar to those now held by officers in the Royal Indian Marine be granted to British and Indian officers alike. Commissions should confer an authority limited to the force in which they are granted, namely, the Royal Indian Navy. We strongly deprecate the use of any form of commission which might convey the impression that the officers of the Indian Navy held a purely subordinate status, such as is held by the Viceroy's commissioned officers in the Indian Army. With the proposed initial strength of the force the recruitment of executive officers will be required at a rate of about three a year. We agree generally with Admiral Richmond's recommendation that British and Indian boys should enter by competition at the age of 18 exactly in the same way as public school cadets are now taken into the Royal Navy.

Recruitment of Cadets.—We also agree with the proposal that Indian cadets should be mainly recruited through the Prince of Wales College, Dehra Dun. The examination for the cadetship would be held simultaneously in England and in India. One appointment every year should be reserved for an Indian by either from Dehra Dun or an English public school, subject to reaching a minimum qualifying standard in examination. For some time at any rate standard of education at Dehra Dun will be appreciably lower than at an English public school. It will, therefore, probably be necessary to raise the age limit for Indians recruited from Dehra Dun to the Indian Navy from 18 to 19 years on the analogy of a similar rule which already obtains in the case of Indian cadets for the Army. As the age of study at Dehra Dun is 12 to 18 it is likely that several years will elapse before any Indian cadets enter the navy from that institution. We do not see how this can be avoided. Cadetship should, however, be open to Indian boys at English public schools from the beginning. We understand that there is a considerable number of these, some of whom might be attracted towards the service in the Indian Navy. On passing the examination British and Indian cadets should undergo a course of two years' training in naval technical schools in the United Kingdom. On the completion of their training cadets would be given their commissions in the Indian Navy and would proceed to join a squadron in Indian waters.

Technical Training.—"We have considered the possibility of conducting initial technical training in India but this would entail very great expenditure on establishment, and would reduce to the vanishing point the funds available for ships. It occurs to us that Indian entrants into the navy *via* Dehra Dun will normally have no sea experience whatever before passing their entrance examination into the Navy and that if they are then sent straight to the United Kingdom and made to undergo sea training in small vessels in home waters there is a possibility of undue discouragement. We therefore propose that candidates for the Indian Navy in the last two years of their education at Dehra Dun would be given opportunities for short cruises and some sea training in ships of the training squadron for officers and warrant officers of the new service.

We do not propose any departure from the **rates of pay and pension** now drawn by officers of the Royal Indian Marine. These rates were revised in 1920 and are in our view likely to prove suitable. We need not, therefore, complicate our scheme for reorganization by introducing any proposals under this head. Ratings will be drawn from the same class and in the same manner as lascars are at present recruited for the Royal Indian Marine. The rates of pay will also be the same, but provision will have to be made for pensions and for furlough. We are confident that this class will provide suitable material for manning a combatant force and that if the terms of service are made attractive they will be forthcoming.

It might be found advisable to open up new fields of recruitment on the Malabar coast, Coromandel coast, at Chittagong and elsewhere. The training of recruits which will also include educational training will be carried out at Bombay in depot ship and the training squadron. It will be necessary in the initial stages to obtain the services of two specialist officers, (gunnery and minesweeping) to supervise the training of recruits. We have considered the

question of employing British petty officers instructors, but in view of the language difficulty we are doubtful whether their services would be of any value.

We recommend that **engineer officers** should be recruited for the Royal Indian Navy in precisely the same manner as they now are for the Royal Indian Marine, that is to say, appointments are made by the Secretary of State for India. A candidate must have served at least five years as an apprentice in a recognized engineering firm or a Government dockyard. A candidate must not be less than 21 or more than 25 years of age. In order to facilitate the entry of Indians into this branch of the service we recommend that the Government of India should give financial assistance to suitable Indian candidates who are anxious to undergo the necessary training and qualify for selection. This assistance might take the forms, *inter alia* of passage concessions and payments of premia to engineering firms and Government might also exert their influence to induce such firms to take Indians as apprentices. One vacancy in three should also be definitely reserved for an Indian if a suitable candidate is forthcoming. The terms of service should remain as at present. The port engineering appointments mentioned will continue to be available for promotion of these officers."

The report then discusses the important question of the command: "We propose that the command of the force should be vested in a flag-officer with the title of **'Flag Officer Commanding.'** This officer should be appointed from the Royal Navy at first, but later on the appointment should normally be held by an officer of the Indian Navy. We prefer the title of Flag Officer Commanding to that of Chief of the Naval Staff as more descriptive of his status and duties. 'Chief-of-Staff' implies an advisory position without executive powers . The tenure of office in our opinion should be for a minimum period of three years. In the early stages an Indian Navy could be administered by a single commander with a small staff. The simpler the organisation the more economically will it be controlled.

In his relation to the Government of India the officer commanding should be in a position substantially analogous to that of the Air Officer Commanding the Royal Air Force, that is to say he should be subordinate to the Commander-in-Chief in India in the latter's capacity of minister of defence and responsible to him for the administration and efficiency of the Navy. Like the Air Officer Commanding, he should also have the right of personal access to the Viceroy for the purpose of consultation on important questions relating to the Navy.

His headquarters should be in Bombay, but we propose that he should be at liberty to pay periodical visits to the headquarters of the Government of India in order to confer with the marine department.

In war time **unity of command** is essential, and we therefore recommend in war the ships and the personnel of the Indian Navy should automatically come under the direct control of the Commander-in-Chief, East Indies. For this reason as well as others we think it desirable that the post of Flag Officer Commanding should never be held by an officer senior on the navy list to the Naval Commander-in-Chief."

Leasing of Dockyard—As regards the maintenance of vessels, etc., the Committee state: "We have considered very carefully the question of the dockyard. There are three possibilities open to the Government of India: First to sell the yard outright; second to retain it under their own management; third to lease it for a term of years to a private firm. We have no hesitation in rejecting the idea of a sale."

After examining all suggestions the Committee state: "We recommend that the dockyard be offered for lease, and we consider that the lease should be for a period of fifteen years in the first instance. An essential condition should be that work for the Indian Navy should be given priority whenever required. The refit, however, of ships of the Indian Navy should not be a perquisite of this yard, but should be open to competitive tenders. The existence of other yards in Calcutta and Colombo and of Mazagaon dockyard in Bombay itself should act as a safeguard against monopoly and consequent inflation of charges."

Finance.

Indian finance has undergone such remarkable changes during the last few years that some general introduction of the present position is required. Originally there was one budget for the whole of India, the provinces receiving fixed allowances with which to meet their expenses. As the provinces grew in importance and in power, it was obvious that these conditions could not continue, and there developed a long struggle between the Provinces and the Government of India, the former claiming a larger share of the revenues raised within their borders and greater freedom in the spending of them, and the Government of India, perhaps not unnaturally, striving to retain its control. But by degrees the situation was improved into a working compromise. Contracts were made between the Government of India insuring to the provinces adequate and growing funds, an important element in these contracts being the division of certain heads of revenue between the Province and the Government of India, so as to give the Province as the tax collecting agency an incentive to develop revenues to a reasonable extent. Later, the provinces were given the product of certain fixed heads of revenue instead of the usufruct of divided heads, such fixed heads being decided by negotiation and agreement. A change of this character went deeper than appears at first sight. When the Government of India was entitled to half of any particular head of revenue it naturally kept a jealous eye on expenditure charged to that revenue, and changes of policy which might affect the yield of that revenue. This gave occasion to much interference with the provinces which was

increasingly resented. But when there was a cleaner cut between the revenues of the Government of India and of the provinces occasions for interference and control were naturally fewer. It may be said that by the time of the passing of the Reform Act of 1919 a satisfactory adjustment between the financial roles of the Government of India and the Provinces had been reached and the real friction was small.

The Clean Cut.—Progress went very much further in the Reform Act of 1919. By that instrument there was made what is for all practical purposes a clean cut between Imperial and Provincial finance. The Government of India took unto itself the whole product of those taxes which experience and usage have recognised as federal rather than State, which is a better description of the relations between the Government of India and the Provinces than Imperial and Provincial. Such taxes are customs, income tax, posts and telegraphs, railways and the salt tax. It made over to the provinces, for their free and unfettered disposal, the yield of the other great taxes, such as land revenue, excise, forests, stamps, and miscellaneous heads. The full definition and dividing line drawn under this scheme will be found in the section The Government of India (*q.v.*). But when a balance sheet on these lines was drawn it was found that the Government of India was insufficiently provided with money to carry out its responsibilities. The deficiency was 983 lakhs of rupees. It was very difficult to adjust this contribution equitably amongst the provinces concerned, because under the various settlements effected there was a wide disparity between the conditions of the various provinces. Ultimately the following decision was arrived at, with machinery for the gradual extinction of the provincial contributions, if ever the Government of India was in the happy position to be able to do without the funds.

In the financial year 1921-22 contributions shall be paid to the Governor-General in Council by the local Governments mentioned below according to the following scale :—

Name of Province.	Contributions (In lakhs of rupees).
Madras	348
Bombay	58
Bengal	63
United Provinces	240
Punjab	175
Burma	64
Central Provinces and Berar ..	22
Assam	15

From the financial year 1922-23 onwards a total contribution of 983 lakhs, or such smaller sum as may be determined by the Governor General in Council, shall be paid to the Governor General in Council by the local Governments mentioned in the preceding rule. When for any year the Governor General in Council determines as the amount of the contribution a smaller sum than that payable for the preceding year, a reduction shall be made in the contribution of those local Governments only whose last previous annual contribution exceeds the proportion specified below of the smaller sum so determined as the total contribution; and any reduction so made shall be proportionate to such excess:—

Madras	..17—90ths.
Bombay	..13—90ths.
Bengal	..19—90ths.
United Provinces	..18—90ths.
Punjab	.. 9—90ths.
Burma	..6½—90ths.
Central Provinces and Berar	.. 5—90ths
Assam	2½—20ths.

It was from the first recognised by those who took a long view of Indian finance that this arrangement could only be temporary. The allocation of revenues as between the Federal Government and the Provinces created an open sore; the Provinces never ceased to protest against contributions to the central revenues which they maintained were inequitable, and impracticable in several cases without reducing the whole standard of the administration. Moreover a superficial examination of these contributions, and their distribution as between Province and Province, seemed to indicate astounding inequities. In practice these were not as marked as they seemed, for instance although Bombay only contributed Rs. 58 lakhs a year, and Madras Rs. 348, the custodians of the Provincial finances argued that Madras was much better off than Bombay. The point put before the Statutory Commission in 1919, and thereafter pressed on the Government of India was, that there could be no peace until these contributions were abolished altogether. This view was accepted ; and as soon as funds became available the Government of India set about the work. First Bengal was excused its contribution altogether. Then in the financial year 1925-26 substantial remissions were made to all the Provinces in accordance with the principle outlined above. As they did not greatly benefit Bombay, and to a lesser extent Burma, special contributions were made to the funds of those Provinces. Then in the year 1926-27 no demands were made on the Provinces under this head. The Government of India utilised what it regarded as its permanent surplus revenue largely to reduce the contributions. Then it used its actual budget surplus in order to wipe out the balance. True, no assurance was given that this would be a permanent arrangement yet for all practical purposes it meant that the Provincial contributions as fixed under the settlements of 1919 were wiped off the slate and this was confirmed in the Budget of 1928-29.

But this did not end the discussion; indeed it was only the first phase. A large issue remains, and despite the extinction of the Provincial contributions the finances of some of the Provinces are in an unsatisfactory state. Broadly the issue may be put in this way. The Government of India has taken the growing heads of revenue those which issue from taxes on income and customs. The Provinces are left with resources which are either almost static, like land revenue, or which are actually declining, as with excise where steps are being taken to reduce the consumption of alcoholic liquor in response to the strong Indian sentiment towards prohibition. At the same time the Provinces are confronted with the great growing sources of expenditure, like those on education and sanitation, which bulk largely in Provincial budgets. The burden is heaviest in the industrial provinces, such as Bombay and Bengal. The standard of living is high; wages and costs are a good deal above those of the agricultural provinces. This means an expensive administration. On the other hand the industrial progress which induces this costlier administration pours all its taxable product into the coffers of the Government of India. Rules made to give Bombay and Bengal some share in the Income Tax receipts have been inoperative in practice. Whilst therefore relief is felt at the abolition of the Provincial Contributions under the 1919 settlement, it is felt that this does not go far enough, and there is still this pressure for some share in the revenues from the taxes on income which, it is believed, alone can put the industrial Provinces on a satisfactory basis. The question was remitted, with others, to the Parliamentary Commission which under the chairmanship of Sir John Simon is charged with the duty of inquiring into the working of the Indian constitution and making proposals for the future. In 1928 a financial expert, Mr. Leyton, was added to the Secretariat for this duty, because all the evidence went to show that the adjustment of these differences was an integral part of the working of the constitutional machine.

Railway Finance.—The year 1924-25 was marked by another step of great importance in the better organisation of Indian finance. As is explained in detail under the section Railways (*q.v.*) the Government of India is a great railway owner. It owns and operates itself a very large proportion of the railway system through what are called State Railways; it is the principal shareholder in other lines which are leased to Companies which operate them. Prior to the year in question, the railway finances were incorporated in the general finances of the country. The effects of this were unfortunate. As the finances of a State are not managed on commercial lines, the railways were not conducted on commercial principles. Then the annual allotments to railway expenditure were not determined by the needs of the railways themselves, but by the amount at the disposal of the Government of India. The evil effects of this policy were forcibly exposed in the report of a strong committee of investigation, usually called after the name of its chairman, the Acworth Committee, which recommended the entire separation of the Railway Budget from the general finances. Some delay incurred in giving effect to this recommendation, but it was carried out in the year 1924-25. The bases of the settlement were complete separation of finance; a definite annual contribution from the railway revenues to the general revenues; and the creation of a Standing Finance Committee of the Legislative Assembly to review estimates of railway expenditure before they are placed before the Assembly. The railway contribution was settled on the basis of one per cent. on the capital at charge, plus one-fifth of the surplus profits further, if after the payment of the contributions so fixed the amount available for transfer to Railway Reserves exceed the sum of Rs. 3 crores, one-third of the excess should be paid to the General Revenues. The effects of this change are expected to yield to the General Revenues a fixed contribution from the railway property instead of a varying figure destructive of accurate budgetting, and to give to the railways the usufruct of their operation and secure management and development on commercial principles.

I. RECENT INDIAN FINANCE.

The year 1924 marked a distinct and very important stage in the finances of India. Those who have studied the history of Indian finance will remember the general trend of the country's balance sheet. Up to the outbreak of the war, it was a record of very careful finance, with a general surplus of revenue over expenditure, all such surpluses, save when they were in the nature of "windfalls" going to the avoidance of debt. Throughout the war the finances were carefully handled and with certain moderate increases in taxation the accounts were made to balance. But commencing in 1919 a lamentable change came over the situation. The wanton invasion of India by Afghanistan meant a war which cost the exchequer directly some 34 crores of rupees. Nor was this all. Whilst the military resistance of Afghanistan to the Indian forces was contemptible, and Kabul lay open to easy seizure if it had been thought worth while to occupy it, the effect of this attack was to set a large part of the North-West Frontier ablaze and to thrust on the Government of India a series of costly expeditions. When these were completed, there remained the necessity of establishing a new Frontier system to take the place of that which collapsed in 1919. This especially in the notoriously troublesome country of Waziristan, (*q. v.* Frontier) involved the occupation of certain dominating posts and of connecting them with each other and with the advanced military stations of India by a series of very expensive roads. This abnormal expenditure dislocated the financial equilibrium of the whole country. Nor is it possible to acquit the Finance Department of the Government of India in the difficult post-war period of a relaxation of that close control of expenditure which in previous years had balanced the accounts, even in the years of famine and plague. The result was that the accumulated deficits of the Government of India reached the very high figure of Rs. 100 crores. This led to two results.

Retrenchment and Taxation.—Bowing to the insistent demand for retrenchment the Government of India appointed in 1922 a

increasingly resented. But when there was a cleaner cut between the revenues of the Government of India and of the provinces occasions for interference and control were naturally fewer. It may be said that by the time of the passing of the Reform Act of 1919 a satisfactory adjustment between the financial roles of the Government of India and the Provinces had been reached and the real friction was small.

The Clean Cut.—Progress went very much further in the Reform Act of 1919. By that instrument there was made what is for all practical purposes a clean cut between Imperial and Provincial finance. The Government of India took unto itself the whole product of those taxes which experience and usage have recognised as federal rather than State, which is a better description of the relations between the Government of India and the Provinces than Imperial and Provincial. Such taxes are customs, income tax, posts and telegraphs, railways and the salt tax. It made over to the provinces, for their free and unfettered disposal, the yield of the other great taxes, such as land revenue, excise, forests, stamps, and miscellaneous heads. The full definition and dividing line drawn under this scheme will be found in the section The Government of India (*q.v.*). But when a balance sheet on these lines was drawn it was found that the Government of India was insufficiently provided with money to carry out its responsibilities. The deficiency was 983 lakhs of rupees. It was very difficult to adjust this contribution equitably amongst the provinces concerned, because under the various settlements effected there was a wide disparity between the conditions of the various provinces. Ultimately the following decision was arrived at, with machinery for the gradual extinction of the provincial contributions, if ever the Government of India was in the happy position to be able to do without the funds.

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Railway Finance.—The year 1924-25 was marked by another step of great importance in the better organisation of Indian finance. As is explained in detail under the section Railways (*q.v.*) the Government of India is a great railway owner. It owns and operates itself a very large proportion of the railway system through what are called State Railways; it is the principal shareholder in other lines which are leased to Companies which operate them. Prior to the year in question, the railway finances were incorporated in the general finances of the country. The effects of this were unfortunate. As the finances of a State are not managed on commercial lines, the railways were not conducted on commercial principles. Then the annual allotments to railway expenditure were not determined by the needs of the railways themselves, but by the amount at the disposal of the Government of India. The evil effects of this policy were forcibly exposed in the report of a strong committee of investigation, usually called after the name of its chairman, the Acworth Committee, which recommended the entire separation of the Railway Budget from the general finances. Some delay incurred in giving effect to this recommendation, but it was carried out in the year 1924-25. The bases of the settlement were complete separation of finance; a definite annual contribution from the railway revenues to the general revenues; and the creation of a Standing Finance Committee of the Legislative Assembly to review estimates of railway expenditure before they are placed before the Assembly. The railway contribution was settled on the basis of one per cent. on the capital at charge, plus one-fifth of the surplus profits further, if after the payment of the contributions so fixed the amount available for transfer to Railway Reserves exceed the sum of Rs. 3 crores, one-third of the excess should be paid to the General Revenues. The effects of this change are expected to yield to the General Revenues a fixed contribution from the railway property instead of a varying figure destructive of accurate budgetting, and to give to the railways the usufruct of their operation and secure management and development on commercial principles.

I. RECENT INDIAN FINANCE.

The year 1924 marked a distinct and very important stage in the finances of India. Those who have studied the history of Indian finance will remember the general trend of the country's balance sheet. Up to the outbreak of the war, it was a record of very careful finance, with a general surplus of revenue over expenditure, all such surpluses, save when they were in the nature of "windfalls" going to the avoidance of debt. Throughout the war the finances were carefully handled and with certain moderate increases in taxation the accounts were made to balance. But commencing in 1919 a lamentable change came over the situation. The wanton invasion of India by Afghanistan meant a war which cost the exchequer directly some 34 crores of rupees. Nor was this all. Whilst the military resistance of Afghanistan to the Indian forces was contemptible, and Kabul lay open to easy seizure if it had been thought worth while to occupy it, the effect of this attack was to set a large part of the North-West Frontier ablaze and to thrust on the Government of India a series of costly expeditions. When these were completed, there remained the necessity of establishing a new Frontier system to take the place of that which collapsed in 1919. This especially in the notoriously troublesome country of Waziristan, (*q. v.* Frontier) involved the occupation of certain dominating posts and of connecting them with each other and with the advanced military stations of India by a series of very expensive roads. This abnormal expenditure dislocated the financial equilibrium of the whole country. Nor is it possible to acquit the Finance Department of the Government of India in the difficult post-war period of a relaxation of that close control of expenditure which in previous years had balanced the accounts, even in the years of famine and plague. The result was that the accumulated deficits of the Government of India reached the very high figure of Rs. 100 crores. This led to two results.

Retrenchment and Taxation.—Bowing to the insistent demand for retrenchment the Government of India appointed in 1922 a

retrenchment committee, on the model of the Geddes Committee which overhauled the extravagant post-war expenditure of the British Government. This committee is generally called after its chairman, the Inchcape Committee. It sat in 1923, and presented a report which recommended reductions in expenditure which amounted in the aggregate to Rs. 18 crores.

Financial equilibrium was established and a surplus realised in the Budget of 1923-24.

Statement comparing the actual Revenue and Expenditure of the Central Government (Imperial Revenue and Expenditure before the Reforms) with the Revised Estimates for each year from 1914-15 to 1926-27.

In thousands of Rupees.]

---	Revenue.	Expenditure.	Surplus(+) Deficit(—)
1914-15 ..	76,15,35	78,83,14	—2,67,79
1915-16 ..	80,00,96	81,79.26	—1.78,30
1916-17 ..	98,53,10	87,31,37	+11,21.73
1917-18 ..	1,18,70,58	1,06,57,52	+12,13,06
1918-19 ..	1,30,40,66	1,33,13,72	—5,73,06
1919-20 ..	1,37,13,98	1,60,79,27	—23,65,29
1920-21 ..	1,35,33,32	1,61,64,17	—26,00,85
1921-22 ..	1,15,21,50	1,42,86,52	—27,65,02
1922-23 ..	1,21,41.29	1,36,43,05	—15,01,76
1923-24 ..	1,33,16,33	1,30,77,63	+ 2,39,00
1924-25 ..	1,38,03,92	1,32,35,66	+5,68,26
1925-26 ..	1,33 32.98	1,30,01,80	+3,31,18
1926-27 ..	1,31,70,00	1,28,74.00	..2,96,00

II. THE PRESENT FINANCIAL POSITION.

Two distinctive features marked the Budget for 1928-29, and they were the close approximation of estimates to actuals in the final figures, and the remarkable degree of stability established in what had for long been the rather erratic course of Indian finance. The final accounts for the year 1926-27 showed a surplus of Rs. 2,82 lakhs. The trade record for the year 1927-28 was on the whole a steady one, and marked by a stability in prices unknown since the outbreak of the War. On the whole, the Finance Member was inclined to find evidence of a steady advance and to opine that the effects of the post-War trade depression were being dissipated. The Customs revenue was up to expectations. The taxes on income, which are a powerful factor in Indian finance, were disappointing, largely because the profits on the jute industry were below the anticipated figure. On the other hand, the contributions of the Railways to the general revenues on the scale explained earlier in this section were better. Indeed, when the balance sheet was struck it was found that the variation in the Budget almost exactly balanced themselves at the figure of Rs. 1,65 lakhs.

Capital Account.—In other respects the financial position disclosed in the Budget was eminently satisfactory. A factor which differentiates the finances of the Government of India from most other administrations is the great importance of the capital account. The Government of India has to finance the Railways and Irrigation Works, and to provide the loan funds on behalf of the Provinces. Nothing could better illustrate the growth of the financial strength of India than the comparative ease with which the Government finances a capital programme of a magnitude which would have been regarded as fantastic before the War. These transactions are shown in what are called the Ways and Means section of the Budget, and their range and importance are set out in the following statement :—

(Crores of rupees.)

Liabilities.	Revised, 1927-28.	Budget. 1928-29.
Railway Capital Outlay ..	30.0	28.0
Other capital outlay	2.3	4.4
Provincial Governments' transactions	8.0	7.0
Discharge of debt (net) ..	25.4	19.1
Miscellaneous (net)	3.0	—.2
	68.7	58.3

Resources.		
Rupee Loan (net)	18.5	32.0
Sterling loan (net)	9.1	..
Postal Cash Certificates and Savings Bank	6.7	6.6
Other unfunded debt ..	4.9	5.1
Debt redemption	5.2	5.6
Depreciation and Reserve Funds	5.8	6.8
Gain on revaluation of Securities in the Paper Currency Reserve, etc.. (net) ..	7.1	..
Reduction of cash balance ..	11.4	2.2
	68.7	58.3

One or two points in this capital programme merit comment or explanation. The rupee loan for the year yielded Rs. 18½ crores only, whilst the total amount of debt redeemed was Rs. 25.4 crores. The Finance Member confessed that perhaps in their anxiety to secure the best terms for the taxpayer, and not to disturb the rather high price for Government securities, the Government had made the terms of the loan less attractive than they should have been. In consequence, the resources of the Government had to be increased by a loan of £ 7½ millions in London, which was promptly subscribed, and a good deal of it was afterwards bought back by Indian investors through the ordinary operations of the market. Looking ahead, the Finance Member saw his way to finance the capital commitments for the year 1928-29 by a rupee loas of Rs. 32 crores, of which not more than Rs. 13 crores would be new money. The Finance Member was therefore justified in finding source of satisfaction in having financed a capital expenditure of the magnitude indicated in the Ways and Means statement in a year of rather difficult monetary conditions. Nothing could perhaps better indicate the strengthening of Indian credit than the price of Indian Government securities ; the figures are so illustrative that they are given below and they tend to justify the criticism that for a relatively undeveloped country the

price of gilt-edged securities in India is if anything too high :—

	MARKET PRICE ON.											
	1st Feb. 1923.		1st Feb. 1924.		1st Feb. 1925.		1st Feb. 1926.		1st Feb. 1927.		1st Feb. 1928.	
	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.
5 per cent. Tax-free loan, 1945-55	88	4	96	10	97	15	100	12	107	5	106	10
3½ per cent. Indian Government rupee loan..	57	0	66	0	66	9	70	8	77	7	75	15

The following further figures compare the prices of India stock and other stock in London on certain dates. They show even more clearly than they did last year that the credit of the Government of India now stands considerably higher in the London market in relation to the British Government and other gilt-edged borrowers than it did in 1914 :—

	30th April 1914.	30th April 1923.	1st Feb. 1926.	1st Feb. 1927.	31st Dec. 1927.
India 3 per cent. loan	75¼	60¼	58	59⅜	62¾
India 3½ per cent. loan	88¼	70¼	68	70⅜	72¼
Local loans 3 per cent. stock	87	69½	64¼	63⅞	65
LONDON COUNTY COUNCIL :—					
3½ per cent. stock	97	79⅞	73	74½	73⅓
3 per cent. stock	81	68½	63	64	63¾

Budget for 1928-29.—With these preliminary remarks, we can consider the Budget for 1928-29, saying at once that it was of an unheroic and conventional character. The great constructive work was done in the earlier years of Sir Basil Blackett's tenure of office as Finance Minister, which was drawing to a close when this statement was presented ; the last Budget was therefore in the nature of a final clearing up, leaving a fairly clean sheet for his successor. The changes from normal anticipated were of a relatively minor character. They are summarised below :—

The aggregate revenue of 1928-29 was put at 132.23 crores and the expenditure at 1,29.60 crores. At this stage, therefore, we have a surplus of 2,63 lakhs. The main variations from the revised estimate for the current year may be summarised as follows :—

	(Lakhs of rupees.) Better.	Worse.
Customs	1,55	..
Taxes on Income	1,35	..
Salt	25	..
Opium (net)	..	25
Railways	..	88
Provincial contributions ..	2,58	..
Revenue Reserve Fund ..	..	1,69
Debt Services..	67	..
Civil Administration	..	41
Military Services	..	18
Other heads	..	36
	6,40	3,77
Net ..	2,63	

Satisfaction.—The country shared the satisfaction of the Finance Department in this satement, when it recalled the extinction of the financial contributions from the Provinces, the substantial reductions in railway fares and freights, and the sacrifice of a crore of revenue under the policy of assisting the cotton textile industry. One or two special liabilities had however, to be provided for. Post Office Cash Certificates, on the lines of the English War Savings Certificates, were introduced in India in 1917 and have proved very popular, the aggregate amounting to Rs. 40 crores. Following the general practice, the interest had been treated as a revenue charge, but it is thought prudent to lay down that a special reserve must be created to meet this liability. But it was decided to treat the surplus as a recurrent balance, and to utilise to make permanent instead of temporary the balance of the contributions from the Provinces held more or less in suspense, and finally to remove these contributions, the sum in question being Rs. 2,58 lakhs. With this allocation made, the Budget left a nominal surplus of Rs. 5 lakhs. It was therefore a conventional Budget, and one of consolidation rather than the branching out into fresh fields of finance.

Reception of the Budget.—As a financial statement the Budget was generally approved, but when it was presented to the Legislature, it was received in a critical mood, from political rather than financial reasons. Certain token

Statement showing the Debt of India outstanding at the close of each financial year.

	31st March 1923.	31st March 1924.	31st March 1925.	31st March 1926.	31st March 1927.	31st March 1928.
		(In crores of rupees.)				
In India :—						
Loans	339.83	358.81	370.38	368.29	374.44	372.30
Treasury Bills in the hands of the public	21.59	2.12	..	..	..	9.00
Treasury Bills in the Paper Currency Reserve	49.65	49.65	49.65	49.65	41.47	31.94
Other Obligations—						
Post Office Savings Banks	23.20	24.79	25.64	27.23	29.51	31.99
Cash Certificates	3.13	8.42	13.12	20.96	26.68	30.86
Provident Funds, etc.	36.17	39.00	42.39	46.36	51.02	56.09
Total Loans, etc.	411.07	410.58	420.03	417.94	415.91	413.24
Total Other Obligations	62.50	72.21	81.15	94.55	107.21	118.94
Total in India	473.57	482.79	501.18	512.49	523.12	532.18
		(In millions of £.)				
In England :—						
Loans	222.92	244.53	263.39	266.35	265.09	272.32
War Contribution	19.71	19.27	18.81	18.32	17.81	17.27
Capital value of liabilities undergoing redemption by way of terminable railway annuities	61.31	60.10	58.84	57.53	56.19	54.79
Provident Funds, etc.	.04	.13	.16	.21	.27	.19
Total in England	303.98	324.03	341.20	342.41	339.36	344.57
		(In crores of rupees.)				
Equivalent at 1*s*. 6*d*. to the Rupee	405.31	432.04	454.93	456.55	452.48	459.43
Total Debt	878.88	914.83	956.11	969.04	975.60	991.61
Productive for Central Government	536.65	557.09	600.05	623.38	654.62	686.54
Productive for Provinces	87.49	97.56	106.43	114.60	120.17	126.34
Total Productive	624.14	654.65	706.48	737.98	774.79	812.88
Unproductive	254.74	260.18	249.63	231.06	200.81	178.73
Total	878.88	914.83	956.11	969.04	975.60	991.61

cuts were carried, as an expression of disapproval of policy; certain large reductions were carried, in the full knowledge that the Governor General would restore them, and therefore they could be indulged in with the knowledge that the administration of the country would not be impaired. The most notorious of these was the rejection of the demand for the expenditure of the Secretary of State for India, on the ground that the office was unnecessary in view of the appointment of a High Commissioner. These were dealt with in a resolution from the Government of India, which sets out the final result of the discussion on the Budget.

The following reductions were made by the Legislative Assembly in the demands presented to them :—

Demand.	Amount. Rs.
16.—Customs	1
28.—Executive Council	80,999*
38.—Army Department	5,70,999*
40.—Central Board of Revenue ..	10
72.—Miscellaneous	3,40,000*
Ditto	100
Ditto	100
74.—North-West Froniter Province .	100
Ditto. ditto. ..	100
82.—Expenditure in England—Secretary of State for India ..	13,44,999*

General Statement of the Revenue and Expenditure.

—	Accounts, 1926-27.	Revised Estimate, 1927-28.	Budget Estimate, 1928-29.
REVENUE—	Rs.	Rs.	Rs.
Principal Heads of Revenue—			
Customs	47,38,10,721	48,63,50,000	50,18,37,000
Taxes on Income	15,64,96,338	15,64,62,000	16,99,58,000
Salt	6,69,81,053	6,75,42,000	7,00,08,000
Opium	4,33,13,748	3,80,22,000	3,47,77,000
Other Heads	2,17,50,148	2,27,64,000	2,20,10,000
TOTAL PRINCIPAL HEADS ..	76,23,52,008	77,11,40,000	79,85,90,000
Railways : Net Receipts (as per Railway Budget)	34,07,08,387	38,95,20,000	38,50,00,000
Irrigation : Net Receipts	10,25,576	10,47,000	12,36,000
Posts and Telegraphs : Net Receipts ..	70,64,577	51,76,000	57,37,000
Interest Receipts	4,08,59,285	3,30,50,000	2,91,97,000
Civil Administration	86,05,079	95,34,000	1,01,32,000
Currency and Mint	4,15,51,227	2,72,97,000	2,48,81,000
Civil Works	15,78,791	15,63,000	14,41,000
Miscellaneous	60,01,096	46,49,000	81,82,000
Military Receipts	4,94,68,064	1,48,84,000	2,94,12,000
Provincial Contributions and miscellaneous adjustments between Central and Provincial Governments	5,17,75,451	10,59,000	....
Extraordinary Items	60,10,258	1,84,79,000	26,67,000
TOTAL REVENUE ..	1,31,69,99,799	1,27,73,98,000	1,29,64,75,000
DEFICIT	....	....	....
TOTAL ..	1,31,69,99,799	1,27,73,98,000	1,29,64,75,000

General Statement of the Revenue and Expenditure—*contd.*

—	Accounts, 1926-27.	Revised Estimate, 1927-28.	Budget Estimate, 1928-29.
	Rs.	Rs.	Rs.
EXPENDITURE—			
Direct Demands on the Revenues	4,19,95,169	4,19,95,000	4,24,84,000
Salt and other Capital outlay charged to Revenue.	7,18,385	16,87,000	6,41,000
Railways: Interest and Miscellaneous Charges (as per Railway Budget)	28,05,95,177	32,59,62,000	33,02,00,000
Irrigation	15,50,436	92,000	23,10,000
Posts and Telegraphs	75,82,192	81,67,000	81,66,000
Debt Services	16,74,49,672	15,57,83,000	14,90,61,000
Civil Administration	11,13,43,847	11,28,16,000	11,69,45,000
Currency and Mint	76,37,072	91,49,000	69,63,000
Civil Works	1,89,74,160	1,62,55,000	1,73,31,000
Miscellaneous	3,96,15,605	3,91,74,000	4,10,06,000
Military Services	69,91,63,889	56,40,84,000	58, 4,12,000
Miscellaneous adjustments between the Central and Provincial Governments	4,52,896	3,47,000	....
Extraordinary Items	2,99,21,308	18,87,000	4,50,000
TOTAL EXPENDITURE CHARGED TO REVENUE ..	1,31,69,99,799	1,27,73,98,000	1,29,59,96,000
SURPLUS	....	....	5,06,000
TOTAL ..	1,31,69,99,799	1,27,73,89,000	1,29,64,75,000

THE LAND REVENUE.

The principle underlying the Land Revenue system in India has operated from time immemorial. It may be roughly formulated thus—the Government is the supreme landlord and the revenue derived from the land is equivalent to rent. On strictly theoretical grounds, exception may be taken to this statement of the case. It serves, however, as a substantially correct description of the relation between the Government and the cultivator. The former gives protection and legal security. The latter pays for it according to the value of his holding. The official term for the method by which the Land Revenue is determined is "Settlement." There are two kinds of settlements in India—Permanent and Temporary. Under the former the amount of revenue has been fixed in perpetuity, and is payable by the landlord as distinguished from the actual cultivator. The Permanent Settlement was introduced into India by Lord Cornwallis at the close of the eighteenth century. It had the effect intended of converting a number of large revenue farmers in Bengal into landlords occupying a similar status to that of landowners in Europe. The actual cultivators became the tenants of the landlords. While the latter became solely responsible for the payment of the revenue, the former lost the advantage of holding from the State. This system has prevailed in Bengal since 1795 and in the greater part of Oudh since 1859. It also obtains in certain districts of Madras.

Temporary Settlements.

Elsewhere the system of Temporary Settlements is in operation. At intervals of thirty years, more or less, the land in a given district as subjected to a thorough economic survey, on the basis of the trigonometrical and topographic surveys carried out by the Survey Department of the Government of India. Each village area, wherever the Temporary Settlement is in vogue, has been carefully mapped, property-boundaries accurately delineated, and records of rights made and preserved. Under the Permanent Settlement in Bengal the occupant does not enjoy these advantages. The duty of assessing the revenue of a district is entrusted to Settlement Officers, members of the Indian Civil Service specially delegated for this work. The duties of a Settlement Officer are thus described in Strachey's *India* (revised edition, 1911):—"He has to determine the amount of the Government demand and to make a record of all existing rights and responsibilities in the land. He has a staff of experienced subordinates, almost all of whom are natives of the country, and the settlement of the district assigned to him is a work which formerly required several years of constant work. The establishment of agricultural departments and other reforms have however led to much simplification of the Settlement Officer's Proceedings, and to much greater rapidity in the completion of the Settlements. All the work of the Settlement Officer is liable to the supervision of superior officers; the assessments proposed by him require the sanction of the Government before they become finally binding: and his judicial decisions may be reviewed by the Civil Courts. It is the duty of the settlement officer to make a record of every right which may form the subject of future dispute, whether affecting the interests of the State or of the people. The intention is to alter nothing; but to maintain and place on record that which exists."

The Two Tenures.

Under the Temporary Settlement land tenures fall into two classes—peasant-holdings and landlord-holdings, or *Ryotwari* and *Zemindari* tenures. Broadly speaking, the difference between the two in a fiscal sense is that in Ryotwari tracts the *ryot* or cultivator pays the revenue direct; in *Zemindari* tracts the landlord pays on a rental assessment. In the case of the former, however, there are two kinds of *Ryotwari* holdings—those in which each individual occupant holds directly from Government, and those in which the land is held by village communities, the heads of the village being responsible for the payment of revenue on the whole village area. This latter system prevails in the North. In Madras, Bombay, Burma and Assam, ryotwari tenure is on an individual basis, and the Government enters into a separate agreement with every single occupant. The basis of assessment on all classes of holdings is now more favourable to the cultivator than it used to be. Formerly what was believed to be a fair average sum was levied on the anticipated yield of the land during the ensuing period of settlement. Now the actual yield at the time of assessment alone is considered, so that the cultivator gets the whole of the benefit of improvements in his holding subsequently brought about either by his own enterprise or by "unearned increment." The Government, however, may at a new settlement re-classify a holding so as to secure for itself a fair share in an increment that may have resulted from public works in the vicinity, such as canals and railways, or from a general enhancement of values. But the principle that improvements effected by private enterprise shall be exempt from assessment is now accepted by the Government and provided for in definite rules.

Incidence of the Revenue.

The incidence of the revenue charges varies according to the nature of the settlement, the class of tenure, and the character and circumstances of the holding. Under the Permanent Settlement in Bengal Government derive rather less than £3,000,000 from a total rental estimated at £12,000,000. Under Temporary Settlements, 50 per cent. of the rental in the case of *Zemindari* land may be regarded as virtually a maximum demand. In some parts the impost falls as low as 35 and even 25 per cent. and only rarely is the proportion of one-half the rental exceeded. In regard to *Ryotwari* tracts it is impossible to give any figure that would be generally representative of the Government's share. But one-fifth of the gross produce is the extreme limit, below which the incidence of the revenue charge varies greatly. About sixteen years ago the Government of India were invited in an influentially signed memorial to fix one-fifth of the gross produce as the maximum Government demand. In reply to this memorial and other representations the Government of India (Lord Curzon being Viceroy) issued a Resolution in defence of their Land Revenue Policy. In it was stated that "under the existing practice the Government is already taking much less in revenue than it is now invited to exact" and "the average rate is everywhere on the down grade." This Resolution, together with the statements of Provincial Governments on which it was based, was published as a volume; it is still the authoritative exposition of the principles controlling the Land Revenue Policy of the Government of India. In a series of propositions claimed to be established by this Resolution the following points are noted:—(1) In *Zemindari* tracts progressive moderation is the key-note of the Government's policy, and the standard of 50 per cent. of the assets is more often departed from on the side of deficiency than excess; (2) in the same areas the State does not hesitate to interfere by legislation to protect the interests of the tenants against oppression at the hands of the landlords; (3) in *Ryotwari* tracts the policy of long-term settlements is being extended, and the proceedings in connection with new settlements simplified and cheapened; (4) local-taxation (of land) as a whole is neither immoderate nor burdensome; (5) over-assessment is not, as alleged, a general or widespread source of poverty, and it cannot fairly be regarded as a contributory cause of famine. At the same time the Government laid down as principles for future guidance—(*a*) large enhancements of revenue, when they occur, to be imposed progressively and gradually, and not *per saltum*; (*b*) greater elasticity in revenue collection, suspensions and remissions being allowed according to seasonal variations and the circumstances of the people; (*c*) a more general resort to reduction of assessments in cases of local deterioration.

Protection of the Tenants.

In regard to the second of the five propositions noted above, various Acts have been passed from time to time to protect the interests of tenants against landlords, and also to give greater security to the latter in possession of their holdings. The Oudh Tenancy Act of 1886 placed important checks on enhancement of rent and eviction, and in 1900 an Act was passed enabling a landowner to entail the whole or a portion of his estate, and to place it beyond the danger of alienation by his heirs. The Punjab Land Alienation Act, passed at the instance of Lord Curzon, embodied the principle that it is the duty of a Government which derives such considerable proportion of its revenue from the land, to interfere in the interests of the cultivating classes. This Act greatly restricted the credit of the cultivator by prohibiting the alienation of his land in payment of debt. It had the effect of arresting the process by which the Punjab peasantry were becoming the economic serfs of money-lenders. A good deal of legislation affecting land tenure has been passed from time to time in other provinces, and it has been called for more than once in Bengal where under the Permanent Settlement (in the words of the Resolution quoted above); "so far from being generously treated by the Zemindars, the Bengal cultivator was rack-rented, impoverished, and oppressed."

Government and Cultivator.

While the Government thus interferes between landlord and tenant in the interests of the latter, its own attitude towards the cultivator is one of generosity. Mention has already been made of the great advantage to

the agricultural classes generally of the elaborate systems of Land Survey and Records of Rights carried out and maintained by Government. In the Administration Report of Bombay for 1911-12, it is stated:—"The Survey Department has cost the State from first to last many lakhs of rupees. But the outlay has been repaid over and over again. The extensions of cultivation which have occurred (by allowing cultivators to abandon unprofitable lands) have thus been profitable to the State no less than to the individual; whereas under a *Zemindari* or kindred system the State would have gained nothing, however much cultivation had extended throughout the whole of 30 years' leases." On the other hand, the system is of advantage to the *ryots* in reducing settlement operations to a minimum of time and procedure. In the collection of revenue the Government consistently pursues a generous policy. In times of distress, suspensions and remissions are freely granted after proper inquiry.

Land revenue is now a provincial head of revenue and is not shown in the All-India accounts. It may be taken roughly at £28 million, as compared with £84 million said to have been raised annually by Aurungzebe from a much smaller Empire.

The literature on the subject is considerable. The following should be consulted by readers who require fuller information:—" Land Revenue Policy of the Indian Government," 1902 (Superintendent of Government Printing); Baden Powell's "Land Systems of British India": Sir John Strachey's "India, its Administration and Progress, 1911," (Macmillan & Co.); M. Joseph Chailley's "Administrative Problems of British India" (Macmillan & Co., 1910), and the Annual Administration Reports of the respective Provincial Government.

EXCISE.

The Excise revenue in British India is derived from the manufacture and sale of intoxicating liquors, hemp drugs, toddy and opium. It is a commonplace amongst certain sections of temperance reformers to represent the traffic in intoxicating liquors as one result of British rule. There is, however, abundant evidence to show that in pre-British days the drinking of spirituous liquors was commonly practised and was a source of revenue.

The forms of intoxicating liquor chiefly consumed are country spirit; fermented palm juice; beer made from grain; country brands of rum, brandy, etc., locally manufactured malt beer and imported wine, beer and spirits. Country spirit is the main source of revenue, except in the Madras Presidency, and yields about two-thirds of the total receipts from liquors. It is usually prepared by distillation from the Mhowra flower, molasses and other forms of unrefined sugar, fermented palm juice and rice. In Madras a very large revenue is derived from fresh toddy. The British inherited from the Native Administration either an uncontrolled Out-Still System or in some cases a crude Farming System and the first steps to bring these systems under control were the limitation of the number of shops in the area farmed, and the establishment of an improved Out-Still System under which the combined right of manufacture and sale at a special shop was annually granted. This of course was a kind of control, but it only enabled Government to impose haphazard taxation on the liquor traffic as a whole by means of vend fees. It did not enable Government to graduate the taxation accurately on the still-head duty principle nor to insist upon a standard of purity or a fixed strength of liquor. Moreover for political and other reasons the extent of control could not at first be complete. There were tribes of aborigines who regarded the privilege of making their own liquor in their private homes as a long established right and who believed that liquor poured as libations to their god should be such as had been made by their own hands. The introduction of any system amongst those peoples had to be worked very cautiously. Gradually as the Administration began to be consolidated the numerous native pot-stills scattered all over the country under the crude arrangements then in force began to be collected into Central Government enclosures called Distilleries, thus enabling Government to perfect its control by narrowing the limits of supervision; and to regularize its taxation by imposing a direct still-head duty on every gallon issued from the Distillery. Under Distillery arrangements it has also been possible to regulate and supervise thoroughly the manufacture of its liquor and its disposal subsequent to leaving the Distillery by means of a system of transport passes, establishment supervision, improved distribution and vend arrangements.

Various Systems.

The Out-Still System may be taken to include all systems prior in order of development to the imposition of Still-head duty. Briefly stated the stages of development have been—First: farms of large tracts; Second: farms of smaller areas; Third: farms of the combined right to manufacture and sell at particular places without any exclusive privilege over a definite area; Fourth: farms of similar right subject to control of means and times for distilling and the like. The Provincial Governments have had to deal with the subject in different ways suited to local conditions, and so the order of development from the lower forms of systems to the higher has not been always everywhere identical in details. Yet in its essence and main features the Excise Administration in most provinces of British India has progressed on uniform lines the keynote lying in attempts, where it has not been possible to work with the fixed duty system in its simplest forms, to combine the farming and fixed duty systems with the object of securing that every gallon of spirit should bear a certain amount of taxation. The Out-Still System has in its turn been superseded by either the Free-supply system or the District Monopoly system. The Free-supply system is one of free competition among the licensed distillers in respect of manufacture. The right of vend is separately disposed of. The District

monopoly system on the other hand is one in which the combined monopoly of manufacture and sale in a district is leased to a farmer subject to a certain amount of minimum still-head duty revenue in the monopoly area being guaranteed to the State during the term of the lease.

The recommendations of the Indian Excise Committee of 1905-06 resulted in numerous reforms in British India, one of them being that the various systems have been or are gradually being superseded by the Contract Distillery System under which the manufacture of spirit for supply to a district is disposed of by tender, the rate of still-head duty and the supply price to be charged are fixed in the contract and the right of vend is separately disposed of. This is the system that now prevails over the greater portion of British India. The other significant reforms have been the revision of the Provincial Excise Laws and Regulations, and the conditions of manufacture, vend, storage and transport, an improvement in the quality of the spirit, an improved system of disposal of vend licenses, reductions and re-distributions of shops under the guidance and control of Local Advisory Committees and gradual enhancement of taxation with a view to checking consumption.

Since the issue of the report of the Excise Committee 1905-06, no less than 213,000 square miles of territory were transferred from the out-still to the distilling system. In 1905-06 39 per cent. of the total excise area and 28 per cent. of the population of that area were served by out-stills, the proportions in 1912-13 were only 15 and 8 per cent. respectively.

Excise has now been made over entirely to the Provincial Governments, and the duties vary from province to province. The governing principle in fixing these rates is the highest duty compatible with the prevention of illicit distillation. In the Bombay Presidency the issue of spirit to all country spirit shops has been rationed on the basis of consumption for the year 1920-21. From that consumption reduced to proof gallons. 10 per cent. is deducted in the case of shops in Bombay City and 5 per cent. elsewhere and the ration is then fixed for each shop according to the issues in the corresponding month of 1920-21. This is the most important step taken by the new Government to reduce consumption. Two large distilleries in the Presidency have been placed entirely under Government management, thus partially superseding the Contract Distilling system.

Sap of the date, palmyra, and cocoanut palms called toddy, is used as a drink either fresh or after fermentation. In Madras and Bombay the revenue is obtained from a fixed fee on every tree from which it is intended to draw the liquor and from shop license fees. In Bengal and Burma the sale of shop licenses is the sole form of taxation. Country brands of rum, and so-called brandies and whiskies, are distilled from grape juice, etc. The manufacture is carried out in private distilleries in various parts of India. A number of breweries has been established, mostly in the hills, for the manufacture of a light beer for European and Eurasian consumption. The uniform fee of 8 annas per gallon is levied all over India at the time of issue.

Foreign liquor is subject to an import duty at the tariff rates, which are set out in the Customs Tariff (*q.v.*). It can only be sold under a license.

Since the war Brandy and Whisky have been manufactured in considerable quantities at Baroda.

The base used is the Mhowra flower. It is drunk in big towns as a substitute for German spirit, and is excised at tariff rates.

Drugs.—The narcotic products of the hemp plant consumed in India fall under three main categories, namely, ganja or the dry flowering tops of the cultivated female hemp plant charas, or the resinous matter which forms an active drug when collected separately; and bhang, or the dried leaves of the hemp plant whether male or female cultivated or uncultivated. The main features of the existing system are restricted cultivation under supervision, storage in Bonded Warehouses, payment of a quantitative duty before issue, retail sale under licenses and restriction on private possession. Licenses to retail all forms of hemp drugs are usually sold by auction. The sale of charas has been prohibited in the Bombay Presidency except Sindh from the 1st April 1922.

Opium.—Opium is consumed in all provinces in India. The drug is commonly taken in the form of pills; but in some places, chiefly on social and ceremonial occasions, it is drunk dissolved in water. Opium smoking also prevails in the City of Bombay and other large towns. The general practice is to sell opium from the Government Treasury, or a Central Warehouse, to licensed vendors. The right of retail to the public is sold by annual auction to one or several sanctioned shops. Further legislation against opium smoking in clubs and dens is now under contemplation.

The revenue from opium is derived mainly from exports of what is called provision opium to foreign countries and from the sale to Provincial Governments of excise opium for internal consumption in India. The entire quantity is now exported under the system of direct sales to Foreign and Colonial governments, the system of auction sales in Calcutta to traders for export to foreign countries having been stopped with effect from 7th April, 1926. In no case are exports permitted without an import certificate by the Government of the country of import as prescribed by the League of Nations.

It has been decided to reduce the total of the opium exported since the calendar year 1926 by 10 per cent. annually in each subsequent year until exports are totally extinguished at the end of 1935.

Excise opium is sold to Provincial Governments for internal consumption in India at a fixed price based on the cost of production. This opium is retailed to licensed vendors at rates fixed by the Provincial Governments and varying from Province to Province.

The estimated opium revenue in 1928-29 is Rs. 3,47,77,000.

SALT.

The salt revenue was inherited by the British Government from Native rule, together with a miscellaneous transit dues. These transit dues were abolished and the salt duty consolidated and raised. There are four great sources of supply; rock salt from the Salt range and Kohat Mines in the Punjab; brine salt from the Sambhar Lake in Rajputana, salt brine condensed on the borders of the lesser Rann of Cutch; and sea salt factories in Bombay, Madras and at the mouth of the Indus.

The Salt Range mines contains an inexhaustible supply. They are worked in chambers excavated in salt strata, some of which are 250 feet long, 45 feet wide and 200 feet high. The Rajputana supply chiefly comes from the Sambhar Lake where brine is extracted and evaporated by solar heat. In the Rann of Cutch the brine is also evaporated by solar heat and the product is known as Baragara salt. Important works for the manufacture of that salt were opened in Dhrangadhra State in 1923. In Bombay and Madras sea water is let into shallow pans on the sea-coast and evaporated by solar heat and the product sold throughout India. In Bengal the damp climate together with the large volume of fresh water from the Ganges and the Brahmaputra into the Bay of Bengal render the manufacture of sea-salt difficult and the bulk of the supply, both for Bengal and Burma, is imported from Liverpool, Germany, Aden, Bombay and Madras.

Broadly, one half of the indigenous salt is manufactured by Government Agency, and the remainder under license and excise systems. In the Punjab and Rajputana the salt manufactories are under the control of the Northern India Salt Department, a branch of the Commerce and Industry Department. In Madras and Bombay the manufactories are under the supervision of Local Governments. Special treaties with Native States permit of the free movement of salt throughout India, except from the Portuguese territories of Goa and Damaun, on the frontiers of which patrol lines are established to prevent the smuggling of salt into British India.

From 1888-1903 the duty on salt was Rs. 2-8 per maund of 82 lbs. In 1903, it was reduced to Rs. 2; in 1905 to Rs. 1-8-0; in 1907 to Re. 1 and in 1916 it was raised to Rs. 1-4-0. The successive reductions in duty have led to a largely increased consumption, the figures rising by 25 per cent. between 1903-1908. In 1923 the duty was doubled bringing it again to Rs. 2-8. In 1924 it was reduced to Re. 1-4-0. The estimated salt revenue in 1928-29 is Rs. 7,00,08,000.

CUSTOMS.

The import duties have varied from time to time according to the financial condition of the country. Before the Mutiny they were five per cent.; in the days of financial stringency which followed they were raised to 10 and in some cases 20 per cent. In 1875 they were reduced to five per cent., but the opinions of Free Traders, and the agitation of Lancashire manufacturers who felt the competition of the Indian Mills, induced a movement which led to the abolition of all customs dues in 1882. The continued fall in exchange compelled the Government of India to look for fresh sources of revenue and in 1894 five per cent. duties were re-imposed, yarns and cotton fabrics being excluded. Continued financial stringency brought piece-goods within the scope of the tariff, and after various expedients the demands of Lancashire were satisfied by a general duty of 3½ per cent. on all woven goods—an import duty on goods by sea, an excise duty on goods produced in the country. The products of the hand-looms are excluded. These excise duties are intensely unpopular in India, for reasons set out in the special article dealing with the subject. In 1910-11, in order to meet the deficit threatened by the loss of the revenue on opium exported to China, the silver duty was raised from 5 per cent. to 4d. an ounce, and higher duties levied on petroleum, tobacco, wines, spirits, and beer. These were estimated to produce £1 million annually.

The Customs Schedule was completely recast in the Budget of 1916-17 in order to provide additional revenue to meet the financial disturbance set up by the war. The general import tariff, which had been at the rate of 5 per cent. *ad valorem* since 1894 was raised to 7½ per cent. *ad valorem*, except in the case of sugar; as India is the largest producer of sugar in the world the import duty on this staple was fixed at 10 per cent. There was also a material curtailment of the free list. The principal article of trade which was not touched was cotton manufactures. For the past twenty years the position has been that cotton twists and yarns of all kinds are free of duty while a duty at the rate of 3½ per cent. is imposed on woven goods of all kinds whether imported or manufactured in Indian mills. The Budget left the position as it stood. The Government of India would have been glad to see the tariff raised to 5 per cent. without any corresponding alteration of the excise, but were over-ruled by the Cabinet on the ground that this controversial matter must come up for discussion after the war. Finally the Budget imposed export duties on tea and jute. In the case of tea the duty was fixed at Re. 1-8-0 per 100 lbs.; in the case of jute the export duty on raw jute was fixed at Rs. 2-4-0 per bale of 400 lbs., approximately equivalent to an *ad valorem* duty of 5 per cent.; manufactured jute was charged at the rate of Rs. 10 per ton on sacking and Rs. 16 per ton on Hessians.

The Customs Tariff was further materially modified in the Budget for 1917-18. In the previous year an export duty on jute was imposed at the rate of Rs. 2-4-0 per bale of 400 lbs. in the case of raw jute and Rs. 10 per ton on sackings, and Rs. 16 per ton on Hessians; these rates were doubled, with a view to obtaining an additional revenue of £500,000. The import duty on cotton goods was raised from 3½ per cent. to 7½ per cent. without any alteration in the Excise, which remained at 3½ per cent. This change was

expected to produce an additional revenue of £1,000,000. The question of the Excise was left untouched, for the reason, amongst others, that the Government could not possibly forego the revenue of £320,000, which it was expected to produce. With these changes in operation the revenue from Customs in 1920-21 was Rs. 32,37,29,000.

The Customs Tariff was further raised in the Budget of 1921-22 in order to provide for the big deficit which had then to be faced. The general *ad valorem* duty was raised from 7½ to 11 per cent.; a special duty was levied on matches of 12 annas per gross boxes in place of the existing *ad valorem* duty of 7½ per cent. the duties on imported liquors was raised to 5 annas per degree of proof per gallon; the *ad valorem* duty of 7½ per cent. was raised to 20 per cent. in the case of certain articles of luxury; the import duty on foreign sugar was increased from 10 to 15 per cent. and the duty on manufactured tobacco was raised by 50 per cent. The Customs duties were further increased in the Budget of 1922-23. The Government proposals in this direction have been described in an early passage. They were to raise the general Customs duty from 11 to 15 per cent., the cotton excise duty from 3½ per cent. to 7½ per cent., the duty on sugar from 15 to 25 per cent., a duty of 5 per cent. on imported yarn, a rising duty on machinery, iron, steel and railway material from 2½ per cent. to 10 per cent. together with the general duty on articles of luxury from 20 per cent. to 30 per cent. In the course of the passage of the Budget through the Legislatures the cotton excise duty was retained at 3½ per cent., the duty on machinery was retained at 2½ per cent. and the duty on cotton piece-goods at 11 per cent, the other increases being accepted. In 1925 the Cotton Excise duties were finally abolished. Full details with regard to the customs duty are set out in the section on Indian Customs Tariff (*q. v.*). The estimated revenue from the customs in 1928-29 is Rs. 50,18,37,000.

The Senior Collectors were Covenanted Civilians specially chosen for this duty, before the introduction of the Imperial Customs Service in 1906. Since that date, of the five Collectorships at the principal ports (Calcutta, Bombay, Madras, Rangoon, and Karachi) three are ordinarily reserved for Members of the I. C. S. (*i. e.*, "Covenanted Civilians"). The other two are reserved for members of the Imperial Customs Service.

Assistant Collectors in the Imperial Customs Service are recruited in two ways: (*a*) from members of the Indian Civil Service—3 vacancies, and (*b*) by the Secretary of State—19 vacancies. There are in addition a few Gazetted Officers in what is known as the Provincial Customs Service. These posts are in the gift of the Government of India, and are usually filled by promotion from the subordinate (in the Government sense of the word) service. The "subordinate" staff is recruited entirely in India.

INCOME TAX.

The income tax was first imposed in India in 1860, in order to meet the financial dislocation caused by the Mutiny. It was levied at the rate of four per cent. or a little more than 9½d. in the pound on all incomes of five hundred rupees and upwards. Many changes have from time to time been made in the system, and the present schedule was consolidated in the Act of 1886. This imposed a tax on all incomes derived from sources other than agriculture which were exempted. On incomes of 2,000 rupees and upwards it fell at the rate of five pies in the rupee, or about 6¼d. in the pound; on incomes between 500 and 2,000 rupees at the rate of four pies in the rupee or about 5d. in the pound. In March 1903 the minimum taxable income was raised from 500 to 1,000 rupees. The income-tax schedule was completely revised, raised, and graduated in the Budget of 1916-17 in the general scale of increased taxation imposed to meet the deficit arising out of war conditions.

Since then the process has been almost continuous and in every financial difficulty the authorities turn to the Income Tax as a means of raising fresh revenue. The last revision was in the Budget of 1922-23, when the scale was fixed as follows :—

RATES OF INCOME-TAX.

	Rate.
A. In the case of every individual, every unregistered firm and every undivided Hindu family :—	
(1) When the total income is less than Rs. 2,000.. ..	*Nil.*
(2) When the total income is Rs. 2,000 or upwards, but is less than Rs. 5,000	..Five pies in the rupee.
(3) When the total income is Rs. 5,000 or upwards, but is less than Rs. 10,000..	..Six pies in the rupee.
(4) When the total income is Rs. 10,000 or upwards, but is less than Rs. 20,000..	..Nine pies in the rupee.
(5) When the total income is Rs. 20,000 or upwards, but is less than Rs. 30,000..	..One anna in the rupee.
(6) When the total income is Rs. 30,000 or upwards, but is less than Rs. 40,000..	..One anna and three pies in the rupee.
(7) When the total income is Rs. 40,000 or upwards	..One anna and six pies in the rupee.
In the case of every company, and every registered firm whatever its total income	.One anna and six pies in the rupee.

RATES OF SUPER-TAX.

In respect of the excess over fifty thousand rupees of total income:—Rate.

(1) In the case of every company .. ..One anna in the rupee.

(2) (*a*) In the case of every Hindu undivided family—

(*i*) in respect of the first twenty-five thousand rupees of the excess .. .. .. *Nil.*

(*ii*) for every rupee of the next twenty-five thousand rupees of such excess .. ..One anna in the rupee.

(*b*) In the case of every individual and every unregistered firm, for every rupee of the first fifty thousand rupees of such excess .. ..One anna in the rupee.

(*c*) In the case of every individual, every unregistered firm and every Hindu undivided family—

(*i*) for every rupee of the second fifty thousand rupees of such excess .. ..One and a half anna in the rupee.

(*ii*) for every rupee of the next fifty thousand rupees of such excess .. ..Two annas in the rupee.

(*iii*) for every rupee of the next fifty thousand rupees of such excess .. ..Two and a half annas in the rupee.

(*iv*) for every rupee of the next fifty thousand rupees of such excess .. ..Three annas in the rupee.

(*v*) for every rupee of the next fifty thousand rupees of such excess .. ..Three and a half annas in the rupee.

(*vi*) for every rupee of the next fifty thousand rupees of such excess .. ..Four annas in the rupee.

(*vii*) for every rupee of the next fifty thousand rupees of such excess .. ..Four and a half annas in the rupee.

(*viii*) for every rupee of the next fifty thousand rupees of such excess .. ..Five annas in the rupee.

(*ix*) for every rupee of the next fifty thousand rupees of such excess .. ..Five and a half annas in the rupee.

(*x*) for every rupee of the remainder of the excess ..Six annas in the rupee.

The head of the Income-Tax Department of a province is the Commissioner of Income-tax who is appointed by the Governor-General in Council. The rest of the income-tax staff in a province are subordinate to him and they are appointed and dismissed by him. His power of appointment and dismissal is, under section 5 (4) "subject to the control of the Governor-General in Council," but the Governor-General in Council exercises this control through the local Government.

The estimated yield of Income-tax in 1928-29 is Rs. 16,99,58,000.

THE INDIAN MINTS.

The silver coinage executed for the Government of India during 1925-26 consisted of Rs. 20,59,729 of half rupees and Rs. 10,13,750 of quarter rupees coined from silver obtained from melting uncurrent coins.

Nickel and Bronze Coinage.—The coinage during 1925-26 consisted of single piece, two-anna pieces and 34,090,544 nickel one-anna pieces. Bronze coinage consisted of 90,059,400 half pice and pies pieces of the aggregate value of Rs. 6,52,970.

HISTORY OF THE COINAGE.

The Indian mints were closed to the unrestricted coinage of silver for the public from the 26th June 1893, and Act VIII of 1893, passed on that date, repealed Sections 19 to 26 of the Indian Coinage Act of 1870, which provided for the coinage at the mints for the public of gold and silver coins of the Government of India. After 1893 no Government rupees were coined until 1897, when, under arrangements made with the Native States of Bhopal and Kashmir, the currency of those States was replaced by Government rupees. The re-coinage of these rupees proceeded through the two years 1897 and 1898. In 1899 there was no coinage of rupees; but in the following year it seemed that coinage was necessary, and it was begun in February 1900, the Government purchasing the silver required, and paying for it mainly with the gold accumulated in the Paper Currency Reserve. In that and the following month a crore of rupees was coined and over 17 crores of rupees in the year ending the 31st March 1910 including the rupees issued in connection with the conversion of the currencies of Native States. From the profit accruing to Government on the coinage it was decided to constitute a separate fund called the Gold Reserve Fund as the most effective guarantee against temporary fluctuations of exchange. The whole profit was invested in sterling securities, the interest from which was added to the fund. In 1906 exchange had been practically stable for eight years, and it was decided that of the coinage profits devoted to this fund, six crores should be kept in rupees in India, instead of being invested in gold securities. The Gold Reserve Fund was then named the Gold Standard Reserve. It was ordered in 1907 that only

one-half of the coinage profits should be paid into the reserve, the remainder being used for capital expenditure on railways. The Gold Standard Reserve was called into action before the year 1907-08 was out. Exchange turned against India, and in March 1908, the Government of India offered bills on the Secretary of State up to half a million sterling, while the Secretary of State sold £1,000,000 Consols in order to meet such demands. During April to August, further sterling bills were sold for a total amount of £8,058,000. On a representation by the Government of India, the Secretary of State agreed to defer the application of coinage profits to railway construction until the sterling assets of the Gold Standard Reserve amounted to £25,000,000. On the outbreak of the war in August 1914 the Reserve was drawn upon to meet the demands for sterling remittances, and Government offer to sell £1,000,000 of Bills weekly.

Gold.

Since 1870 there had been no coinage of double mohurs in India and the last coinage of single mohurs before 1918 in which year coinage was resumed, was in the year 1891-92.

A Royal proclamation was issued in 1918 establishing a branch of the **Royal Mint at Bombay.** It stated :—Subject to the provision of this proclamation the Bombay Branch Mint shall for the purpose of the coinage of gold coins be deemed to be part of the Mint, and accordingly, (*a*) the Deputy Master of the Bombay Branch Mint shall comply with all directions he may receive from the Master of the Mint whether as regards the expenditure to be incurred or the returns to be made or the transmission of specimen coins to England or otherwise and (*b*) the said specimen coins shall be subject to the trial of the pyx under section 12 of the Coinage Act, 1870, so that they shall be examined separately from the coins coined in England or at any other branch of the Mint, and (*c*) the Deputy Master of the Bombay Branch Mint and other officers and persons employed for the purpose of carrying on the business of the Branch Mint may be appointed, promoted, suspended and removed and their duties assigned and salaries awarded and in accordance with the provisions of section 15 of the Coinage Act, 1870. Pending the completion of the arrangements at the Branch, Royal Mint, power was taken by legislation to coin in India gold mohurs of the same weight and fineness as the sovereign. Altogether 2,109,703 pieces of these new coins of the nominal value of Rs. 3,16,45,545, were struck at the Bombay Mint. The actual coinage of sovereigns was begun in August, 1918, and 1,295,372 sovereigns were coined during the year. This branch of the Royal Mint was closed in April, 1919, owing to difficulties in supplying the necessary staff.

The Indian Currency Act of 1927 established a new ratio of the rupee to gold. It established this ratio at one shilling and sixpence by enacting that Government would purchase gold at a price of twenty-one rupees three annas ten pies per tola of fine gold in the form of bars containing not less than forty tolas and would sell gold or, at the option of Government, sterling, for immediate delivery in London at the same price after allowing for the normal cost of transport from Bombay to London. A rate of one shilling and fivepence forty-nine sixty-fourths was notified as Government's selling rate for sterling to meet these obligations.

With the receipt of large consignments of gold, the Bombay Mint made special arrangements for the **refining of gold** by the chlorine process and at the end of the year 1919-20 the Refinery Department was capable of refining a daily amount of 6,000 ounces of raw gold. The Refinery turned out 16,62,466 fine tolas of refined gold in 1920-21.

Silver.

The weight and fineness of the silver coins are :—

—	FINE SILVER grains.	ALLOY grains.	TOTAL grains.
Rupee	165	15	180
Half-rupee	82½	7½	90
Quarter-rupee or 4-anna piece	41¼	3¾	45
Eighth of a rupee or 2-anna piece ..	20⅝	1⅞	22½

One rupee = 165 grains of fine silver.
One shilling = 80 $\frac{4}{11}$ grains of fine silver.
One rupee = shillings 2·0439.

Copper and Bronze.

Copper coinage was introduced into the Bengal Presidency by Act XVII of 1835 and into the Madras and Bombay Presidencies by Act XXII of 1844.

The weight of the copper coins struck under Act XXIII of 1870 remained the same as it was in 1835. It was as follows :—

	Grains troy.
Double pice or half-anna	200
Pice or quarter-anna	100
Half-pice or one-eighth of an anna ..	50
Pie being one-third of a pice or one-twelfth of an anna	33⅓

The weight and dimensions of bronze coins are as follows :—

	Standard weight in grains troy.	Diameter in millimetres.
Pice	75	25·4
Half-pice	37½	21·15
Pie	25	17·45

Nickel.

The Act of 1906 also provides for the coinage of a nickel coin. It was directed that the nickel one-anna piece should thenceforth be coined at the Mint and issue. The notification also prescribed the design of the coin, which has a waved edge with twelve scollops, the greatest diameter of the coin being 21 millimetres and its least diameter 19·8 millimetres. The desirability of issuing a half anna nickel coin was considered by the Government of India in 1909 but after consultation with Local Governments it was decided not to take action in this direction until the people had become thoroughly familiar with the present one-anna coin. The two-anna nickel coin was introduced in 1917-18 ; and the four-anna and eight-anna nickel coins in 1919. The eight-anna nickel is now being withdrawn from circulation.

The Currency System.

The working of the Indian currency system which has commanded a large amount of public attention since 1893, was forced to the front in 1920, as the result of measures taken to stabilise the exchange value of the rupee after the fluctuations caused by the war. These assumed so much importance, and they continue to bulk so largely in all Indian economic questions, than we propose to give here a short summary of the Indian currency system in non-technical language.

I. THE SILVER STANDARD.

Prior to 1893 the Indian currency system was a mono-metallic system, with silver as the standard of value and a circulation of silver rupees and notes based thereon. But with the opening of new and very productive silver mines in the United States of America the supply of silver exceeded the demand and it steadily receded in value. The result was that the gold value of the rupee, which was nominally two shillings, fell continuously until it reached the neighbourhood of a shilling. These disturbances were prejudicial to trade, but they were still more prejudicial to the finances of the Government. The Government of India has to meet every year in London a substantial sum in the form of payment of interest on the debt, the salaries of officials on leave, the pensions of retired officials, as well as large payment for stores required for State enterprises. As the rupee fell in its gold value the number of rupees required to satisfy these payments rose. The total reached a pitch which seriously alarmed the Government, which felt that it might be called upon to raise a sum in rupees which would necessitate a considerable increase in taxation, which should be avoided if possible. It was therefore decided to take measures to raise and fix the gold value of the rupee for the purposes of exchange.

Closing the Mints.—The whole question was examined by a strong committee under the presidency of Lord Herschell, whose report is commonly called the Herschell Report. It was decided in 1893 to close the mints to the unrestricted coinage of silver. This step led, as was intended, to a gradual divergence between the exchange value of the rupee and the gold value of its silver content. Government ceased to add rupees to the circulation. Rupees remained unlimited legal tender and formed the standard of value for all internal transactions. Since Government refused, and no-one else had the power to coin rupees, as soon as circumstances led to an increasd demand for rupees, the exchange value of the rupee began to rise. By 1898 it had approached the figure of one shilling and fourpence. Meantime, in response to the undertaking of Government to give notes or rupees for gold at the rate of fifteen rupees to the pound sterling, gold began to accumulate in the Paper Currency Reserve. These purposes having been attained, a second committee was appointed under the chairmanship of Sir Henry Fowler to consider what further steps should be adopted in the light of these conditions. The report of the Fowler Committee as it was called marked the second stage in Indian currency policy.

II. THE NEW STANDARD.

The Fowler Committee rejected the proposal to re-open the Mints to the free coinage of silver. They proposed that the exchange value of the rupee should be fixed at one shilling and fourpence, or fifteen rupees to the sovereign. They further suggested that the British sovereign should be made a legal tender and a current coin in India: that the Indian mints should be thrown open to the unrestricted coinage of gold; so that the rupee and the sovereign should freely circulate side by side in India. The goal which the Committee had in view was a gold standard supported by a gold currency. Now under the condition which compelled the Government of India to give either rupees or rupee notes for gold tendered in India, at the rate of fifteen rupees to the sovereign, it was impossible for the rate of exchange to rise above one shilling and four pence, save by the fraction which covered the cost of shipping gold to India. But if the balance of trade turned against India, it was still possible for the rate of exchange to fall. To meet this the Fowler Committee recommended that the profits on coining rupees should not be absorbed in the general revenues, but should be set aside in a special reserve, to be called the Gold Standard Reserve. Inasmuch as the cost of coining rupees was approximately elevenpence halfpenny, and they were sold to the public at one and fourpence, the profits were considerable; they were to have been kept in gold, so as to be freely available when required for the support of exchange.

A 16 pence Rupee.—The Government of India professed to accept all the recommendations of the Fowler Committee; actually only a portion of them was put in practice. The official rate of exchange was fixed at one and fourpence. The sovereign and the half sovereign were declared unlimited legal tender in India. But after a first attempt, when sovereigns soon came back to the treasuries, no effort was made to support the gold standard by an active gold currency. The gold mint was not set up. The Gold Standard Reserve was established, but, instead of holding the Reserve in gold, it was invested in British securities. These practices gave rise to conditions which were never contemplated by the Fowler Committee. Reference has been made to the Home Charges of the Government of India, which at the time amounted to

about seventeen millions sterling a year. These are met by the sale of what are called Council Bills. That is to say, the Secretary of State, acting on behalf of the Government of India sold Bills against gold deposited in the Bank of England in London. These Bills when presented in India were cashed at the Government Treasuries. Now if the Secretary of State sold Council Bills only to meet his actual requirements, it follows that the balance of trade in favour of India over and above this figure would be liquidated, as it is in other countries, by the importation of bullion or by the creation of credits. It is a fact that owing to the failure of the policy of encouraging an active gold circulation to support the gold standard, gold tended to accumulate in India in embarrassing quantities. In 1904 therefore the Secretary of State declared his intention of selling Council Bills on India without limit at the price of one shilling fourpence one-eighth—that is to say gold import point. The effect of this policy was to limit the import of gold to India, for it was generally more convenient to deposit the gold in London and to obtain Council Bills against it, than to ship the gold to India. Nevertheless as the Egyptian cotton crop was very largely financed in sovereigns it was sometimes cheaper and more convenient to ship sovereigns from Egypt, or even from Australia, than to buy Council Bills. Considerable quantities of sovereigns found their way into India and circulated freely, particularly in the Bombay Presidency, the Punjab and parts of the Central Provinces.

Sterling Remittance.—This system worked until 1907-08. A partial failure of the rains in India in 1907, and the general financial stringency all over the world which followed the American financial crisis in the autumn, caused the Indian exchange to become weak in November. This was one of the occasions contemplated, in a different form, by the Fowler Committee when it proposed the formation of the Gold Standard Reserve. There had been very heavy coining of rupees in India and the amount in the Reserve was ample. But the Reserve was in securities not in gold, and was therefore not in a liquid form, nor was the time an opportune one for the realisation of securities. Moreover the authorities did not realise that a reserve is for use in times of emergency. It had been assumed that in times of weakness it would be sufficient for the Secretary of State to stop selling Council Bills, and it would firm up; meantime he would finance himself by drawing on the funds in the Gold Standard Reserve. But it was apparent that the stoppage of the sales of Councils was not enough; there was an insistent demand for the export of gold, or the equivalent of gold. The Government of India refused and exchange fell to one and threepence twenty-three thirty-seconds. Ultimately the authorities had to give way. It was decided to sell in India a certain quantity of sterling bills on London at one and threepence twenty-nine thirtyseconds, representing gold export point, and the equivalent of the export of gold. These were met in London from the funds in the Gold Standard Reserve. Bills to the extent of between eight and nine millions sterling were sold, which regularised the position and the Indian export trade recovered. Thus were gradually evolved the main principles of the Indian currency system. It consisted of silver rupees and rupee notes in India, with the sovereign and half sovereign unlimited legal tender at the rate of fifteen rupees to the sovereign, or one and fourpence. The rate of exchange was prevented from rising above gold import point by the unlimited sale of Council Bills at gold point in London; it was prevented from falling below gold point by the sale of Sterling Bills (commonly called Reverse Councils) at gold export point in India. But it was not the system proposed by the Fowler Committee, for there was no gold mint and only a limited gold circulation; some people invented for it the novel term of the gold exchange standard, a term unknown to the law of India. It was described by one of the most active workers in it as a "limping standard."

III. THE CHAMBERLAIN COMMITTEE.

This brings us to the year 1913. There were many critics of the system. Some hankered for a return to the open mints; others objected to the practice of unlimited sales of Council Bills as forcing rupees into circulation in excess of the requirements of the country. But the general advantages of a fixed exchange were so great as to smother the voices of the critics, and the trade and commerce of the country adjusted itself to the one and fourpenny rupee. But there gradually grew up a formidable body of criticism directed against the administrative measures taken by the India Office. These criticisms were chiefly directed at the investment of the Gold Standard Reserve in securities instead of keeping it in gold in India; at a raid on that reserve in order temporarily to relieve the Government of the difficulty of financing its railway expenditure; at the transfer of a solid block of the Paper Currency Reserve from India to London; at the holding of a portion of the Gold Standard Reserve in silver in order to facilitate the coining of rupees; and at the unlimited sales of Council Bills at rates which prevented the free flow of gold to India, thus forcing token rupees into circulation in quantities in excess of the requirements of the country. The cumulative effect of this policy was to transfer from India to London an immense block of India's resources, aggregating over seventy millions, where they were lent out at low rates of interest to the London bankers, whilst India was starved of money until at one point money was not available for loans even against Government securities and the bank rate was artificially high. All these things were done, it was contended, on the *obiter dicta* of a small Finance Committee of the India Office, from which all Indian influence was excluded, and on which London banking influence was supreme. The India Office for long ignored this criticism, until it was summarised in a series of articles in *The Times*, and public

opinion was focussed on the discussion through the action of the India Office in purchasing a big block of silver for coining purposes from Messrs. Montagu & Co., instead of through their recognised and constituted agents, the Bank of England. The Government could no longer afford to stand aloof and yet another Currency Committee was appointed under the chairmanship of Mr. Austen Chamberlain. This is known as the Chamberlain Committee.

New Measures.—The conclusions of this Commission were that it was unnecessary to support the Gold Standard by a gold currency; that it was not to the advantage of India to encourage the internal use of gold as currency; that the internal currency should be supported by a thoroughly adequate reserve of gold and sterling; that no limit should be fixed to the amount of the Gold Standard Reserve, one half of which should be held in gold; that the silver branch of the Gold Standard Reserve should be abolished; that Reverse Councils should be sold on demand; that the Paper Currency should be made more elastic; and that there should be two Indian representatives out of three on the Finance Committee of the India Office. The Committee dealt inconclusively with the accumulation of excessive balances in London, the general tenor of their recommendations being "not guilty, but do not do it again." They gave a passing commendation to the idea of a State Bank. Sir James Begbie, the only Indian banker on the Committee, appended a vigorous minute of dissent, in which he urged that the true line of advance was to discourage the extension of the token currency by providing further facilities for the distribution of gold when increases to the currency became necessary, including the issue of an Indian gold coin of a more convenient denomination than the sovereign or the half sovereign.

IV. CURRENCY AND THE WAR.

The report was in the hands of the Government of India shortly before the outbreak of the war. Some immediate steps were taken, like the abolition of the silver branch of the Gold Standard Reserve, but before the Government could deal entirely with the temporising recommendations of the Commission, the war broke out. The early effects of the war were precisely those anticipated. There was a demand for sterling remittance which was met by the sale of Reverse Councils, £8,707,000, being sold up to the end of January 1915. There were withdrawals from the Post Office Savings Banks, and a net sum of Rs. 8 crores was taken away. There was some lack of confidence in the Note issue, and a demand for gold; Notes to the extent of Rs. 10 crores were presented for encashment and the Government were obliged to suspend the issue of gold. But these were transient features and did not demand a moratorium; confidence was soon revived and Exchange and the Note issue continued strong. The difficulties which afterwards arose were from causes completely unanticipated by all students of the Indian currency. They arose from an immense balance of trade in favour of India, caused by the demand for Indian produce for the United Kingdom and the Allies and the decline in the export trade from these countries; a heavy expenditure in India on behalf of the British Government; and a phenomenal rise in the price of silver. If we take the three years 1916-17 to 1918-19 the balance of trade in favour of India was £6 millions a year above the corresponding years of the previous quinquennium. The disbursements in India on behalf of the Government of the United Kingdom and the Allies were by December 1919 £240,000,000. This balance of trade and expenditure for Imperial purposes could not be financed either by the import of the precious metals, owing to the universal embargo on the movement of gold and silver nor by credits in India. It could be financed only by the expansion of the Note issue, against sterling securities in the United Kingdom, chiefly Treasury Bills, and the issue of coined rupees. But simultaneously there was a reduction in the output of the silver mines of the world coinciding with an increased demand for the metal. The price of silver in 1915 was 27½ pence per standard ounce. In May 1919 it was 58 pence, on the 17th December of that year it was 78 pence. The main difficulties in India were not therefore the prevention of the rupee from falling below the ratio of 15 to one, but to keep it within any limits and to provide a sufficiency to meet the demand.

Rise in Exchange.—The measures adopted by the Government of India in these emergencies were to bring exchange under rigid control, confining remittance to the finance of articles of national importance. The next step was to raise the rate for the sale of Council Bills, so that silver might be purchased at a price which would allow rupees to be coined without loss. The following table shows how rates were raised from one shilling fourpence to two shillings fourpence:—

Date of Introduction.	Minimum Rate for Immediate Telegraphic Transfers.
3rd January 1917	1 4½
28th August 1917 ..	1 5
12th April 1918 ..	1 6
13th May 1919 .	1 8
12th August 1919 .	1 10
15th September 1919 ..	2 0
22nd November 1919 ..	2 2
12th December 1919 .	2 4

Purchase of Silver.—Silver for coining was purchased in large quantities, the following table showing the amount acquired by the Government of India in the last five years :—

—	In open Market (Standard Ounces).	From United States Dollar Reserve (equivalent in Standard Ounces).
1915-16	8,636,000	—
1916-17	124,535,000	—
1917-18	70,923,000	—
1918-19	106,410,000	152,518,000
1919-20 (to 30th November 1919)	14,108,000	60,875,000
Total ..	324,612,000	213,393,000

The total amount is thus 538,005,000 standard ounces.

Gold and silver were taken under control and measures taken to prevent export and melting Gold went to a premium and ceased to function as currency. The Note issue was expanded, and small Notes of one and two and a half rupees were specially prepared to economise the use of silver rupees. The nature of this expansion is shown below :—

Date.	Lakhs of Rupees.					
	Gross Note Circulation.	Composition of Reserve.				Percentage of Total Metallic Reserve to gross Note Circulation.
		Silver.	Gold.	Securities.	Total.	
31st March 1914 ..	66,12	20,53	31,59	14,00	66,12	78·9
,, 1915 ..	61,63	32,34	15,29	14,00	61,63	77·3
,, 1916 ..	67,73	23,57	24,16	20,00	67,73	70·5
,, 1917 ..	86,38	19,22	18,67	48,49	86,38	43·9
,, 1918 ..	99,79	10,79	27,52	61,48	99,79	38·4
,, 1919 ..	153,46	37,39	17,49	98,58	153,46	35·8
30th November 1919 ..	179,67	47,44	32,70	99,53	179,67	44·6

The facilities for the encashment of Notes were reduced. In these ways the Government were able to maintain the broad convertibility of the Note issue and finance the essential trades and expenditure for the Imperial Government. It often meant sailing very near to the wind, but these measures carried the country through the war.

V. THE 1919 COMMITTEE,

The effect of these measures however was to jettison the currency policy pursued from 1893 to 1915, the main object of which was to stabilise the rupee at one and fourpence. The war being over, a Committee was appointed to advise in regard to the future of Indian exchange and currency. It sat in 1919 and reported towards the end of the year. Its main recommendations are summarised below :—

(*i*) It is desirable to restore stability to the rupee and to re-establish the automatic working of the Indian currency system.

(*ii*) The reduction of the fineness or weight of the rupee, the issue of 2 or 3-rupee coins of lower proportional silver content than the present rupee, or the issue of a nickel rupee, are expedients that cannot be recommended.

(*iii*) The maintenance of the convertibility of the note issue is essential, and proposals that do not adequately protect the Indian paper currency from the risk of becoming inconvertible cannot be entertained.

(*iv*) The rise in exchange, in so far as it has checked and mitigated the rise in Indian prices, has been to the advantage of the country as a whole, and it is desirable to secure the continuance of this benefit.

(*v*) Indian trade is not likely to suffer any permanent injury from the fixing of exchange at a high level.

If, contrary to expectation, a great and rapid fall in world prices were to take place, and if the costs of production in India fail to adjust themselves with equal rapidity to the lower level of prices, then it might be necessary to consider the problem afresh.

(*vi*) The development of Indian industry would not be seriously hampered by a high rate of exchange.

(*vii*) The gain to India of a high rate of exchange for meeting the Home charges is an incidental advantage that must be taken into consideration.

(*viii*) To postpone fixing a stable rate of exchange would be open to serious criticism and entail prolongation of Government control.

(*ix*) The balance of advantage is decidedly on the side of fixing the exchange value of the rupee in terms of gold rather than in terms of sterling.

(*x*) The stable relation to be established between the rupee and gold should be at the rate of Rs. 10 to one sovereign, or, in other words at the rate of one rupee for 11·30,016 grains of fine gold, both for foreign exchange and for internal circulation.

(*xi*) If silver rises for more than a brief period above the parity of 2s. (gold), the situation should be met by all other available means rather than by impairing the convertibility of the note issue. Such measures might be (*a*) reduction of sale of Council Bills; (*b*) abstention from purchase of silver; (*c*) use of gold to meet demands for metallic currency. If it should be absolutely necessary to purchase silver, the Government should be prepared to purchase even at a price such that rupees would be coined at a loss.

(*xii*) Council Drafts are primarily sold not for the convenience of trade but to provide for the Home charges in the wider sense of the term. There is no obligation to sell drafts to meet all trade demands; but, if without inconvenience or with advantage the Secretary of State is in a position to sell drafts in excess of his immediate needs, when a trade demand for them exists, there is no objection to his doing so, subject to due regard being paid to the principles governing the location of the reserves.

Council Drafts should be sold as now by open tender at competitive rates, a minimum rate being fixed from time to time on the basis of the sterling cost of shipping gold to India. At present this rate will vary: but when sterling is again equivalent to gold, it will remain uniform.

The Government of India should be authorised to announce, without previous reference to the Secretary of State on each occasion, their readiness to sell weekly a stated amount of Reverse Councils (including telegraphic transfers) during periods of exchange weakness at a price based on the cost of shipping gold from India to the United Kingdom.

(*xiii*) The import and export of gold to and from India should be free from Government control.

(*xiv*) The statutory minimum for the metallic portion of the Paper Currency Reserve should be 40 per cent. of the gross circulation.

As regards the fiduciary portion of the reserve, the holding of securities issued by the Government of India should be limited to 20 crores. The balance should be held in securities of other Governments comprised within the British Empire, and of the amount so held not more than 10 crores should have more than one year's maturity and all should be redeemable at a fixed date. The balance of the invested portion above these 30 crores should be held in short-dated securities, with not more than one year's maturity, issued by Government within the British Empire.

The sterling investments and gold in the Paper Currency Reserve should be revalued at 2s. to the rupee. The depreciation which will result from this revaluation, cannot be made good at once, but any savings resulting from the rise in exchange will afford a suitable means of discharging this liability in a limited number of years.

(*xv*) With a view to meeting the seasonal demand for additional currency, provision should be made for the issue of notes up to five crores over and above the normal fiduciary issue as loans to the Presidency Banks on the security of export bills of exchange.

Minority Report.—The main object of the Committee, it will be seen, was to secure a stable rate of exchange, without impairing the convertibility of the Note issue, and without debasing the standard silver rupee in India, or substituting another coin of inferior metallic content, which would be debasement in another form. In order to attain these ends it was imperative to fix a ratio for the rupee in relation to gold which would ensure that the Government was able to purchase silver for coining purposes without more than temporary loss. For reasons given in the report they fixed this point at two shillings gold: all other recommendations are subsidiary thereto. But in this they were not unanimous: an important member of the Committee, Mr. Dadiba Dalal, of Bombay, appended a minority report in which he urged the adoption of the following courses:—

(*a*) The money standard in India should remain unaltered; that is, the standard of the sovereign and gold mohur with rupees related thereto at the ratio of 15 to 1.

(*b*) Free and unfettered imports and exports by the public of gold bullion and gold coins.

(*c*) Free and unfettered imports and exports by the public of silver bullion and silver coins.

(*d*) The existing silver rupees of 165 grains of fine silver at present in circulation to continue full legal tender.

(e) As long as the price of silver in New York is over 92 cents, Government should not manufacture silver rupees containing 165 grains fine silver.

(f) As long as the price of silver is over 92 cents Government should coin 2 rupee silver coins of reduced fineness compared with that of the present silver rupee and the same to be unlimited legal tender.

(g) Government to sell Council Bills by competitive tenders for the amount defined in the Budget as required to be remitted to the Secretary of State. The Budget estimate to show under separate headings the amount of Council Bills drawn for Home Charges, for Capital Outlay and Discharge of Debt. Council Bills to be sold for Government requirements only and not for trade purposes, except for the purpose mentioned in the next succeeding recommendation.

(h) "Reverse" drafts on London to be sold only at 1s. 3 29-32d. The proceeds of "Reverse" drafts to be kept apart from all other Government funds and not to be utilised for any purpose except to meet drafts drawn by the Secretary of State at a rate not below 1s. 4 3-32d. per rupee.

VI. THE TWO SHILLING RUPEE.

The fundamental recommendation of the Committee was that the rupee should be linked to gold and not to sterling, in view of the decline in the value of sterling ; that it should be linked at the rate of two shillings instead of the standoud value, one and fourpence : all other recommendations were ancillary to this. But it is very important to bear in mind the twofold problem which confronted the Committee. It would be quite easy to fix any low ratio provided the paper currency were made inconvertible, or the rupee debased to such a point that the Government in providing rupee currency, were independent of the price of silver. But if the convertibility of the rupee were to be maintained, and if the rupee were not to be debased, it was essential that the new ratio should be one at which the Government could reasonably rely on purchasing without loss the silver necessary to meet the heavy demands for rupee in India. For reasons set out in the Report, the Committee came to the conclusion that the Government could reckon on purchasing silver for coining at a little under two shillings gold, and that powerfully influenced them in fixing the new ratio at two shillings gold.

The Report Adopted.—The Currency Committee's Report was signed in December 1919 ; but it was not until February 1920 that action was taken thereon. In the first week of that month a Notification was issued in India accepting the principal recommendations in the Report and notifying that the necessary official action would be taken thereon. This action covered a wide field, but for the sake of clarity in this narrative we shall concentrate on the main issue. the changing of the official monetary standard from fifteen rupees to the sovereign to ten rupees to the sovereign and its effect on Indian currency and trade. That may be summarised in a sentence. A policy which was avowedly adopted to secure fixity of exchange produced the greatest fluctuations in the exchanges of any solvent country and widespread disturbance of trade, heavy losses to Government, and brought hundreds of big traders to the verge of bankruptcy.

Financial Confusion.—This result was produced by many causes. It has been explained above that the essential features of the Indian currency system are the free sales of Council Bills at gold export point in London to prevent exchange from rising above the official standard and the sale of Reverse Councils in India at gold export point to prevent exchange from falling below the official standard. Now when the Currency Report was signed the Indian exchanges were practically at two shillings gold. But between the signing of the Report and the taking of official action, there was a sensational fall in the sterling exchanges, as measured in dollars, the dollar-sterling rate, inasmuch as America was the only free gold market, being the dominating factor in the situation. Consequently the Indian exchanges were considerably below the two shillings gold rate when the Notification accepting the Currency Committee's Report was issued The Indian exchanges were two shillings and fourpence, and weak at that ; the gold rate was about two shillings ninepence. There was an immediate and prodigious demand for Reverse Councils, to take advantage of this high rate of exchange ; the market rate jumped up to two shillings eightpence.

Effect of the Rise.—The effect of a rise in exchange has been well described in the words of the Currency Committee's Report ; it is that a rising exchange stimulates imports and impedes exports, the effect of a falling exchange is the reverse.

Now when the official notification of the two shilling rupee was made the Indian export trade was weak. The great consuming markets of Great Britain and America were glutted with Indian produce. The continent of Europe, which was starved of Indian produce and in urgent need of it, had not the wherewithal to pay for it nor the means of commanding credit. The only Indian staples which were in demand were foodstuffs, and as the rains of 1920 failed over a wide area, the Government were not able to lift the embargo on the export for foodstuffs, save to a limited extent in the case of wheat. On the other hand, the import trade was strong. Orders had been placed for machinery and other manufactured goods during the war and after the Armistice for delivery at the discretion of manufacturers. These began to come forward.

Difficulties Accentuated.—In accordance with the principles laid down by the Currency Committee these difficulties were accentuated by the action of Government in raising exchange by an administrative act. The weak export trade was almost killed. At the same time the temptation of a high exchange gave powerful stimulus to the import trade and orders were placed for immense quantities of manufactured goods, in which textiles filled an important place. Afterwards other forces intervened which accentuated the difficulties of the situation. There was a severe commercial crisis in Japan and this

checked the export of Indian cotton. Japan is the largest buyer of Indian cotton, and when her merchants not only stopped buying but began to re-sell in the Indian markets, the trade was severely shaken and stocks accumulated at a great rate. Even before the 1920 crop came into the market the stocks in Bombay were double those in the corresponding period of the previous year. The expectations of a revival in the buying power of the Continent which were held in many quarters were disappointed and throughout the year there was a heavy balance of trade against India, which made the stabilisation of exchange at the high ratio attempted a hopeless proposition.

Confession of Failure.—Government struggled long against these conditions in the desperate hope that a revival of the export trade would come to their assistance, but they were further handicapped by the variations of the sterling-dollar exchange, which at one time took the rate for Reverse Councils to two shillings tenpence half penny. They sold two millions of Reverse Councils a week, then five millions, then dropped down to a steady million. But their policy only aggravated the situation. In addition to arresting the export trade and stimulating the import trade at a time when the precise converse was demanded, their action created an artificial movement for the transfer of capital from India to England. Large war profits accumulated in India since 1914 were hurriedly liquidated and transferred to England. Then the difference between the Reverse Council rate and the market rate, which on some occasions was several pence, induced gigantic speculations. The Exchange Banks set aside all their available resources for the purpose of bidding for Bills, and at once sold their allotments at substantial profits. Considerable groups of speculators pooled their resources and followed the same course. In this way the weekly biddings for the million of Reverse Councils varied from a hundred and 20 millions to a hundred and thirty millions and the money market was completely disorganised. The biddings assumed such proportions that it was necessary to put up fifty lakhs of rupees to obtain the smallest allotment made, five thousand pounds, and Reverse Councils and the large profits thereon came under the entire control of the Banks and the wealthy speculators. Various expedients were tried to remedy the situation but without the slightest effect.

Sterling for Gold.—The first definite break from the recommendations of the Currency Committee came at the end of June, when the Government announced that instead of trying to stabilise the rupee at two shillings gold they would aim at stabilising it at two shillings sterling, leaving the gap between sterling and gold to be closed when the dollar-sterling rate became par. The effect of this was to alter the rate at which Reverse Councils were sold from the fluctuating rate involved in the fluctuations of dollar-sterling exchange to a fixed sterling rate, namely, one shilling elevenpence nineteen-thirty seconds. But this had little practical effect. The biddings for Reverse Councils continued on a very big scale, and the market rate for exchange was always twopence or threepence below the Reverse Council rate. This practice continued until the end of September, when it was officially declared that Reverse Councils would be stopped altogether. Exchange immediately slumped to between one and sixpence and one and sevenpence, and it continued to range between these narrow points until the end of the year. The market made its own rate; it made a more stable rate than the efforts of Government to attain an administrative stability.

Other Measures.—Apart from the effort to stabilise exchange, which had such unfortunate results, the policy of Government had certain other effects. During the year all restrictions on the movement of the precious metals were removed, in accordance with the recommendations of the Currency Committee. This included the abandonment of the import duty on silver, always a sore point with Indian bullionists. Legislative action was taken to alter the official ratio of the sovereign from fifteen to one to ten to one; due notice of this intention was given to holders of sovereigns and of the gold mohurs which were coined as an emergency measure in 1918, and they were given the option of tendering them at fifteen rupees. As the gold value of these coins was above fifteen rupees only a limited number was tendered, although there was extensive smuggling of sovereigns into India to take advantage of the premium. Then measures were adopted to give greater elasticity to the Note issue. Under the old law the invested proportion of the Note issue was fixed by statute and it could be altered only by altering the law or by Ordinance. An Act was passed fixing the metallic portion of the Paper Currency Reserve at fifty per cent. of the Note Issue, the invested portion being limited to Rs. 20 crores in Indian securities and the balance in British securities of not more than twelve months' currency. The invested portion of the Paper Currency Reserve was revalued at the new rate of exchange, and an undertaking was given that the profits on the Note issue would be devoted to writing off the depreciation, as also would be the interest on the Gold Standard Reserve when the total had reached £40 millions. Further, in order to give greater elasticity to the Note issue, power was taken to issue Rs. 5 crores of emergency currency in the busy season against commercial bills. These measures, save the alteration of the ratio, were generally approved by the commercial public.

Results.—It remains to sum up the results of these measures. In a pregnant sentence in their report the Currency Committee say that whilst a fixed rate of exchange exercises little influence on the course of trade, a rising exchange impedes exports and stimulates imports, a falling exchange exercises a reverse influence. Here we have the key to the failure of the currency policy attempted. At the moment when it was sought suddenly and violently to raise the rate of exchange by the introduction of the new ratio of two shillings gold, the export trade was weak and the import trade in obedience to the delivery of long deferred orders was strong. The very principle enunciated by the Currency Committee wrecked the policy which they recommended. The rising rate of exchange scotched the weak export trade and gave a great stimulus to imports. Unexpected forces, such as the financial crisis in Japan, the lack of buying power on the Continent, and the movement for the transfer of capital from India to England at the

artificially high rate of exchange stimulated these forces, but they had their origin in the attempt by administrative action artificially and violently to raise the rate of exchange. If let alone, the natural fall in exchange would have tended to correct the adverse balance of trade; the official policy exaggerated and intensified it. The effects on Indian business were severe. Exporters found themselves loaded with produce for which there was no foreign demand; importers found themselves loaded up with imported goods, bought in the expectation of the continuance of a high rate of exchange, delivered when it had fallen one and fourpence from the highest point reached. Immense losses were incurred by all importers. The Government sold £55 millions of Reverse Councils before abandoning their effort to stabilise exchange at the new ratio; the loss on these—that is the difference between the cost of putting the funds down in London and in bringing them back to India—was Rs. 35 crores of rupees. Government sold £53 millions of gold, without breaking or seriously affecting the premium on gold. The Secretary of State, in the absence of any demand for Council Bills, was able to finance his expenditure in England only through the lucky chance of heavy expenditure on behalf of the Imperial Government for the forces in Mesopotamia—this expenditure being made in India and set off by payments in London. The only advantages were a considerable contraction of the Note issue and the silver token currency.

VII. COMMISSION OF 1925-26.

These unfortunate experiments induced a period of great caution in dealing with Indian currency. The currency quacks having had their way, and proved their ignorance, went out of the field, and the wholesome policy of leaving Exchange alone, to find its natural level, followed. Left alone Exchange established itself round about the old ratio of fifteen to one, that is one shilling and fourpence to the rupee. Meantime great improvements were made in the organisation of Indian credit. The three Presidency Banks were merged in the Imperial Bank of India, a State Bank in all but name, and the Bank entered into a contract with Government to open a hundred new branches in the first five years of its existence. The Bank mobilised and strengthened and widened Indian credit. The metallic backing of the Paper Currency was strengthened and the fiduciary portion of the Reserve brought within negligible proportions. Greater elasticity was established in the currency by the power to issue emergency currency up to Rs. 12 crores against commercial paper endorsed by the Imperial Bank when there is a tightness of money, and the practice of also issuing emergency currency against sterling in England. The Government of India now purchases sterling in India to meet its Home Charges when the conditions are favourable, instead of relying entirely on the sales of Council Bills in London. A notable feature in Exchange history was the rise of Exchange, of its own strength, above the one and fourpenny figure. Towards the close of 1924 it gradually rose to one shilling and sixpence and stayed there.

At this figure Exchange was maintained by Government, though the state of trade might have led to a higher figure. But as the wholly artificial ratio of the two shilling rupee remained on the statute book, the demand for an authoritative inquiry to fix the ratio of the rupee to gold or sterling was insistent, and a Committee was appointed in the autumn of 1925. Of this Commander Hilton Young was chairman, with Sir Henry Strakosch as the chief gold expert. The personnel of the Committee was strongly criticised in India, on the ground that the Indian membership was inadequate, and that the individuals selected were not authoratative; a resolution was passed in the Assembly hostile to the whole body. Never theless the Committee arrived in India in November 1925 and took evidence in Delhi, Bombay and Calcutta. It sailed for England in February 1926, and resumed its hearings in London, and reported on July 1st, 1926.

The main recommendations of this Commission are summarised in the actual report in the following terms, and they are textually reproduced in order that they may be above question:—

(*i*) The ordinary medium of circulation should remain the currency note and the silver rupee and the stability of the currency in terms of gold should be secured by making the currency directly convertible into gold, but gold should not circulate as money.

(*ii*) The necessity of unity of policy in the control of currency and credit for the achievement of monetary stability involves the establishment of a Central Banking system.

(*iii*) The Central Banking functions should be entrusted to a new organisation, referred to as the Reserve Bank.

(*iv*) Detailed recommendations are made as to the constitution and functions and capacities of the Bank.

(*v*) The outlines of a proposed charter are recommended to give effect to the recommendations which concern the Reserve Bank.

(*vi*) Subject to the payment of limited dividends and the building up of suitable reserve funds, the balance of the profits of the Reserve Bank should be paid over to the Government.

(*vii*) The Bank should be given the sole right of note issue for a period of (say) 25 years. Not later than five years from the date of the charter becoming operative, Government notes should cease to be legal tender except at Government Treasuries.

(*viii*) The notes of the Bank should be full legal tender, and should be guaranteed by Government. The form and material of the note should be subject to the approval of the Governor-General in Council. A suggestion is made as to the form of the note.

(*ix*) An obligation should be imposed by statute on the Bank to buy and sell gold without limit at rates determined with reference to a fixed gold parity of the rupee but in quantities of not less than 400 fine ounces, no limitation being imposed as to the purpose for which the gold is required.

(*x*) The conditions which are to govern the sale of gold by the Bank should be so framed as to free it in normal circumstances from the task of supplying gold for non-monetary purposes. The method by which this may be secured is suggested.

(*xi*) The legal tender quality of the sovereign and the half-sovereign should be removed.

(*xii*) Government should offer "on tap" savings certificates redeemable in 3 or 5 years in legal tender money or gold at the option of the holder.

(*xiii*) The paper currency should cease to be convertible by law into silver coin. It should, however, be the duty of the Bank to maintain the free interchangeability of the different forms of legal tender currency, and of the Government to supply coin to the Bank on demand.

(*xiv*) One-rupee notes should be re-introduced and should be full legal tender.

(*xv*) Notes other than the one-rupee note should be legally convertible into legal tender money, *i.e.*, into notes of smaller denomination or silver rupees at the option of the currency authority.

(*xvi*) No change should be made in the legal tender character of the silver rupee.

(*xvii*) The Paper Currency and Gold Standard Reserves should be amalgamated, and the proportions and composition of the combined Reserve should be fixed by statute.

(*xviii*) The proportional reserve system should be adopted. Gold and gold securities should form not less than 40 per cent. of the Reserve, subject to a possible temporary reduction, with the consent of Government, on payment of a tax. The currency authority should strive to work to a reserve ratio of 50 to 60 per cent. The gold holding should be raised to 20 per cent. of the Reserve as soon as possible and to 25 per cent. within ten years. During this period no favourable opportunity of fortifying the gold holding in the Reserve should be allowed to escape. Of the gold holding at least one-half should be held in India.

(*xix*) The silver holding in the Reserve should be very substantially reduced during a transitional period of ten years.

(*xx*) The balance of the Reserve should be held in self-liquidating trade bills and Government of India securities. The "created" securities should be replaced by marketable securities within ten years.

(*xxi*) A figure of Rs. 50 crores has been fixed as the liability in respect of the contractibility of the rupee circulation. Recommendations are made to secure that an amount equal to one-fifth of the face value of any increase or decrease in the number of silver rupees in issue shall be added to or subtracted from this liability, and the balance of profit or loss shall accrue to or be borne by the Government revenues.

(*xxii*) The Issue Department of the Reserve Bank should be kept wholly distinct from its Banking Department.

(*xxiii*) The Reserve Bank should be entrusted with all the remittance operations of the Government. The Secretary of State should furnish in advance periodical information as to his requirements. The Bank should be left free, at its discretion, to employ such method or methods of remittance as it may find conducive to smooth working.

(*xxiv*) During the transition period the Government should publish a weekly return of remittances made. A trial should be made of the system of purchase by public tender in India.

(*xxv*) The cash balances of the Government (including any balances of the Government of India and of the Secretary of State outside India), as well as the banking reserves in India of all banks operating in India, should be centralised in the hands of the Reserve Bank. Section 23 of the Government of India Act should be amended accordingly.

(*xxvi*) The transfer of Reserve assets should take place not later than 1st January 1929, and the Bank's obligation to buy and sell gold should come into operation not later than 1st January 1931.

(*xxvii*) During the transition period the currency authority (*i.e.*, the Government until the transfer of Reserve assets and the Bank thereafter) should be under an obligation to buy gold and to sell gold or gold exchange at its option at the gold points of the exchange. This obligation should be embodied in statutory form, of which the outline is suggested.

(*xxviii*) Stabilisation of the rupee should be effected forthwith at a rate corresponding to an exchange rate of 1*s.* 6*d.*

(*xxix*) The stamp duty on bills of exchange and cheques should be abolished. Bill forms, in the English language and the vernacular in parallel, should be on sale at post offices.

(*xxx*) Measures should be taken to promote the development of banking in India.

(*xxxi*) Every effort should be made to remedy the deficiencies in the existing body of statistical data.

A Minute of Dissent.—Whilst all the members of the Commission signed the report, one of their number, Sir Purshotamdas Thakordas did so subject to a minute of dissent. In the first part of this Minute Sir Purshotamdas subjected the long correspondence between the Government of India and the India Office on currency policy to a detailed analysis. The conclusions to which he came were that throughout the Government of India had striven for a system following the Fowler Report—a gold standard based on a gold currency, and that their efforts were emasculated by successive Secretaries of State, who had in view something which was often called the Gold

Exchange Standard, but which was in effect no standard at all. On the question of the Gold Standard, he stressed the importance of the free movement of gold in India, but subject to this condition accepted the Gold Bullion Standard recommended by his colleagues. As for the proposed Reserve Bank, Sir Purshotamdas, whilst recognising that the scheme proposed might be the ideal, to be attained in process of time, thought that the best immediate course was to develop the Imperial Bank into a central bank for India. The chief point of difference with his colleagues was however the ratio.

Dealing with the ratio of the rupee to gold, Sir Purshotamdas said that in September 1924 the rate was approximately one and fourpence gold. At that time the Government was pressed to stabilise at the then ratio, and thus legally to restore the long current legal standard of money payments. This it declined to do, and by limiting the supply of currency, the ratio was raised to one and sixpence gold by April 1925. He declined therefore to attach any importance to a ratio reached by such measures. Proceeding to analyse the course of prices and wages, he combated the conclusion of his colleagues that prices had adjusted themselves in a preponderant degree to one shilling and sixpence. For these reasons he recommended that the rupee should be stabilised at the rate which was current for nearly twenty years, namely one and fourpence. His conclusions were summarised in the following terms :—

"I look upon the question of the ratio in this Report as being no less important than the question of the standard to be adopted for the Indian Currency System. I am convinced that if the absolute necessity of the free inflow of gold, which I have emphasised, is recognised, and steps taken to ensure it, the gold bullion standard proposed will be the correct one, and the likelihood of its breaking down under the strain of any convulsions in the future will be as remote as it can reasonably be. But I have very grave apprehensions that if the recommendation of my colleagues to stabilise the rupee at 1*s.* 6*d.* is accepted and acted upon, India will be faced during the next few years with a disturbance in her economic organisation, the magnitude of which is difficult to estimate, but the consequences of which may not only hamper her economic development but may even prove disastrous. Such a disturbance and its consequences my colleagues do not foresee to-day. But the possibility of their occurring cannot be ignored. Until adjustment is complete, agriculture threatens to become unattractive and less remunerative than it is to-day, and industries will have to undergo a painful process of adjustment, unnatural, unwarranted and avoidable—an adjustment which will be much to their cost, and affect not only their stability and their progress, but in certain cases, their very existence. And should Nature have in store for India a couple of lean years after the four good harvests that we have had, during the period of forced adjustment to a rate of 1*s.* 6*d.*, the steps that the Currency Authority will have to take to maintain exchange at this rate may deplete the gold resources of the country to an extent that may seriously shake the confidence of her people in the currency system recommended."

A Survey.—The official summary of the Report, and the summary of the minute of dissent, given above, do not however convey an idea of the far-reaching proposals embodied therein. These can be appreciated only if they are examined in close relation to the currency system of India in its various phases since 1890. This was done in an article contributed to *The Bankers' Magazine* by Sir Stanley Reed, which was recognised to be a fair presentation of the position. The main features thereof are reproduced below. There is here some re-treading of the path laid out in the introductory section, but this is unavoidable, if the full bearings of the measures proposed by the Commission are to be appreciated. After describing the standard in force Sir Stanley Reed asked :

What was the standard thus established? It is generally described in London as the Gold Exchange Standard. That status was never claimed for it by its principal protagonist, the late Sir Lionel Abrahams, who described it as a "limping standard." The Royal Commission declares that "in truth in so far as it amounted to a definite standard at all, it was a standard of sterling exchange." Later, they show that "the automatic working of the exchange standard is thus not adequately provided for in India, and never has been. The fundamental basis of such a standard is provision for the expansion and contraction of the volume of currency......Under the Indian system, contraction is not, and never has been, automatic."

However, the standard limped along until the third year of the war. The exchange value of the rupee was stable ; prices adjusted themselves to the ratio ; Indian trade and industry developed. From the narrow standpoint of profit and loss, the investment of the reserves, instead of keeping them in gold, resulted in a considerable gain to the finances estimated in 1925 at £17,962,466. But it had three great disadvantages : it did not inspire public confidence ; it placed the Indian currency at the mercy of the silver market which was on occasion deliberately cornered against it ; and it left the control of currency by the Government divorced from the control of credit by the Presidency Banks, afterwards amalgamated in the Imperial Bank of India. On this the Commission make a very suggestive comment : "when allowance has been made for all misunderstandings and misapprehensions, the fact remains that a large measure of distrust in the present system is justified by its imperfections."

There is, I think, an inadequate appreciation of the influence on the Indian currency and exchange of the war, and the action taken thereafter. The first break in the permanent ratio of one shilling and fourpence did not occur until 1917, when the full effect of dependence on the silver market was revealed. Faced by the unprecedented rise in the price of silver the Government of India had either to raise the price of Council Drafts or else abandon the

convertibility of the Note Issue. Wisely, it took the former alternative; the price of Council Drafts followed the price of silver. The effect of this would have been transitory, but for the attempt in 1920, on the advice of the Babington Smith Committee, to stabilise the rupee at a new ratio of two shillings gold when all gold prices were crashing. It is easy to be wise after the event, but if the Government had followed silver down, as it followed silver up, there is no room to doubt that the rupee would have returned to its "permanent" ratio with no more disturbance than was inevitable under war conditions. However, this was not done. The vain effort to stabilise the new ratio was abandoned in September, 1920, and the two shilling rupee has since been a legal fiction. Left free from administrative action, the rupee fell below one shilling and threepence sterling and one shilling gold in 1921. Since under the influence of good harvests, it has climbed upwards, and has been in the neighbourhood of one shilling and sixpence gold for the past twelve months. But it is not always realised in London that under these vicissitudes the Indian standard has legally perished. In the words of the report, "The stability of the gold value of the rupee is thus based upon nothing more substantial than a policy of the Government, and at present that policy can be found defined in no notification or undertaking by the Government. It has to be implied from the acts of the Government in relation to the currency, and those acts are subject to no statutory regulation or control."

The responsibility remitted to the Commission was not therefore the mere stabilisation of the rupee, but the establishment of a standard which would command reasoned confidence in India, to link the rupee to that standard, and to provide for its statutory control, automatic working and stability; to bring the control of currency and of credit under a single authority and to free the Indian currency and exchange system from the dominance of the silver market. In short, it was to establish the rule of law in place of the practice of administrative discretion.

Scheme for a Gold Currency.—In the course of their inquiries in India the Commission had placed before them a scheme for the immediate establishment of a gold bullion standard, and its early conversion into the gold standard supported by the gold currency which a large body of Indian opinion has insistently demanded. The scheme was presented by the officials of the Finance Department, but it is known to be the work of the Finance Member, Sir Basil Blackett, whose work in India is of the greatest value.

The essential features of this Scheme were the undertaking of a statutory obligation by Government to buy and sell gold bullion in 400 oz. bars; as soon as sufficient gold was available to put a gold coin in circulation; after a period tentatively fixed at five years to undertake to give gold coin in exchange for notes and rupees, and after a further period, also tentatively fixed at five years, make the silver rupee legal tender only for sums up to a small fixed amount. The scheme involved the disposal of 200 crores of silver rupees, or 687 million fine ounces, in ten years; the acquisition in all of £103 millions of gold; and the establishment of credits in London or New York. The cost was estimated at one and two-thirds crores of rupees per annum during the first five years and thereafter from two-thirds of a crore to 1·12 crore.

This scheme is subjected by the Commission to a detailed examination, and rejected on grounds which are convincing. The main grounds for this decision are that the estimates of the amount and time of the gold demand are uncertain, and the absorption by India of this £103 millions of gold, in addition to the normal absorption for the arts, hoards, etc., would powerfully react on the supplies of credit, the rates of interest, and gold prices, throughout the world. The reaction on the silver market from the dethronement of the rupee and realisation of this large quantity of silver bullion would be even more marked, with severely prejudicial effects on the silver hoards of the people of India and the exchanges with China, where India still does a large business. Moreover, the capacity to raise the required credits is doubtful, and the cost is placed by the India Office at Rs. 3 crores a year.

The evidence of the highest financial authorities in London and New York established beyond doubt that it is not in the interests of India to precipitate any currency reform that would violently disturb the gold and silver markets, however desirable that reform might be in itself. Also, that whilst London, working in close harmony with New York, would strain every nerve to supply India with the funds she might require for her own development, it could hardly be expected to provide credits for a scheme which would upset the gold and silver markets. But whilst on these grounds the Commission were not able to endorse Sir Basil Blackett's scheme, there is no doubt that they were profoundly influenced by it in their own recommendations. The ultimate evolution of a policy which promises a cure for India's currency bills is therefore in large measure due to the courage and resolution with which the Finance Authorities in that country faced them.

A Gold Bullion Standard.—The currency system recommended by the Commission is a gold bullion standard. They propose that an obligation shall be imposed by statute on the currency authority to buy and sell gold without limit at rates determined with reference to a fixed gold parity of the rupee, but in quantities of not less than 400 fine ounces, no limitation being imposed as to the purpose for which the gold is required. The essence of this proposal is "that the ordinary medium of circulation in India should remain as at present the currency note and the silver rupee, and that the stability of the currency in terms of gold should be secured by making the currency directly convertible into gold for all purposes, but that gold should not circulate as money. It must not circulate at first, and it need not circulate ever." In breaking adrift from any idea of a sterling exchange, or gold exchange standard, the Commission were powerfully influenced by two factors—the necessity for safeguarding the

Indian system from the price of silver rising above the melting point of the rupee and the desirability of establishing confidence by giving the country not only a real, but conspicuously visible link between the currency and gold.

This reasoning is eminently sound, and the scheme in its broad outlines should command the unhesitating support not only of India, but of all interested in Indian trade. India will have nothing to do with any exchange standard; its experience has been too painful. Proposals to that end would be rejected by the legislature and prolong the currency controversies it is desired to close. The gold bullion standard satisfies all the country's real needs. True, it will not give it the gold mint and the gold currency which have long been demanded; it involves the demonetisation of the sovereign to which a sentimental influence attaches. But whilst it does not do these things, it keeps the door open. No-one contends that a gold standard and a gold currency are immediately practicable. The most rapid progress thereto is embodied in Sir Basil Blackett's scheme, which is full of uncertainties and risks. But when the gold reserves are strengthened to the requisite point, the proposals leave India perfectly free to decide, through her legislature, where a gold currency is worth the expense.

We must, however, face the obligation which a gold bullion standard imposes on the currency authority in India; indeed the Commission do not attempt to burke it. "The obligation is to convert the currency, not merely into foreign exchange, but into metallic gold, and it is an obligation that is not, as formerly, conditional and circumscribed, but absolute and unlimited. Nevertheless. . . .it has been undertaken by every other country that has adopted an effective gold standard: and we have satisfied ourselves that the present resources in the form of reserves at the disposal of the Government of India are adequate to enable the currency authority safely to undertake the obligation, with the measures of fortification, and at the time, which we specify." It is important, therefore, to examine the reserves and the procedure thereanent.

The reserves held for the purpose of maintaining the value of the token currency are two-fold—the Paper Currency Reserve and the Gold Standard Reserve. Their constitution on April 30, 1926 (the date taken by the Commission), was as follows :—

Paper Currency Reserve.

	Rs. Crores.
Silver coin	77·0
Silver bullion	7·7
Gold coin and bullion	22·3
Rupee securities	57·1
Sterling securities	21·0
	185·1

(The gold coin and bullion and the sterling securities are converted at the legal fiction ratio of two shillings per rupee).

The Gold Standard Reserve amounts at present to £40,000,000 invested in British Treasury Bills and other sterling securities.

In theory the two reserves fulfil entirely different functions. The Paper Currency Reserve is the backing for the Note Issue. The Gold Standard Reserve, accumulated from the profits on coining, is designed to maintain the external value of the rupee. In practice their action is closely interlocked, and the first line of defence in the event of a demand for remittance from India is the gold in the paper currency reserve. This invisible line of demarcation will disappear if the Commission's proposals are adopted. The Commission are justified in recommending that the two shall be amalgamated. Their further proposals are that the proportions and composition of the combined Reserve should be fixed by statute; that gold and gold securities should form not less than 40 per cent. of the whole, with 50 to 60 per cent. as the ideal; and that the holding of gold, which now stands at about 12·8 per cent., should be raised to 20 per cent. as soon as possible, and to 25 per cent. in ten years. Generally, they are of opinion that during this period no favourable opportunity of fortifying the gold holding in the Reserve should be allowed to escape.

The proposal to bring the combined Reserve under statutory control is wise; an arguable case could be made out for the thesis that the currency difficulties of India have arisen in the main from the decision of Lord Curzon's Government not to invest the official acceptance of the Fowler Report with legislative authority. The strengthening of the gold reserves is in entire accord with Indian needs.

The Ratio.—The majority of the Commission, Sir Purshotamdas Thakordas being the only dissentient, recommend that the rupee be stabilised in relation to gold at a rate corresponding to an exchange rate of one shilling and sixpence to the rupee. Round this point controversy in India will be concentrated; it is worth while to refresh our memories of the history of the ratio. The Fowler Committee recommended that the rupee should be permanently stabilised at one shilling and fourpence; the Secretary of State for India accepted their recommendations without qualification. The rupee was substantially steady at this point until August, 1917.

One principle advanced in Sir Dadiba Dalal's prophetic minority report in 1919, that the legal standard of money payments should be, and usually is, regarded as less open to repeal or modification than any other legislative Act, will command general acceptance. But when Sir Dadiba went on to suggest that the Government of India might have avoided this measure by larger borrowings in India and encouraging investment abroad he was on ground where no one in touch with Indian conditions can follow him. In the circumstances of the day the Government had no alternative to raising the rate of exchange save in declaring the rupee inconvertible, which during the war would have been disastrous. I must reiterate the belief that the real mischief was done not when the rate of exchange was raised to meet the rise in silver, but when it was not lowered as silver fell; the attempt to stabilise the rupee

at the two shilling rate caused the Government of India large losses, and inflicted a terrible blow on trade; after it was abandoned in September, 1920, the rupee fell below one shilling and threepence sterling and one shilling gold. Thereafter, under the influence of a succession of abundant harvests, it recovered. In 1923, it was one shilling and fourpence sterling: in October, 1924, one and sixpence sterling and one and four gold. With the rise in the pound to gold parity, the rupee reached one and sixpence gold in June, 1925, and has remained there.

It is not, I think, open to doubt that if the vain attempt to stabilise the rupee at two shillings had not been made in 1920, or if advantage had been taken of its return to one and four, the permanent standard might have been re-established without undue disturbance. Sir Purshotamdas Thakordas asserts in his minute of dissent that "the Executive had made up their minds to work up to a one shilling and sixpence ratio long before this Commission was appointed to examine the question. Indeed, they have presented to us the issue in this regard as a *fait accompli*, achieved by them, not having hesitated by manipulation to keep up the rate even while we were in session. I cannot conceive of any parallel to such a procedure in any country."

It is to my mind a great misfortune that the opportunity of restoring the permanent ratio of one and four was not seized when it offered. Not because there is any special sanctity in a ratio as such but because there is a sanctity in the legal standard of money payments. If this had been done the Commission's scheme would have received practically unanimous support in India; as it is a violent controversy will rage round this secondary issue, obscuring the great merit ofthe Commission's basic recommendation a true gold standard, statutory in its composition and automatic in action, with the coalescence of the currency and credit authorities. However, we have to deal with facts as we find them. The majority of the Commission basetheir recommendation on the "conviction, which has been formed and cumulatively reinforced during the progress of our inquiry, that at the present exchange rate of about one shilling and sixpence, prices in India have already attained a substantial measure of adjustment with those in the world at large, and, as a corollary, that any change in the rate would mean a difficult period of readjustment, involving widespread economic disturbance, which it is most desirable in the interests of the people to avoid, and which would in the end be followed by no countervailing advantage." Sir Purshotamdas Thakordas, in a closely-reasoned minute of dissent, supported by a wealth of figures, avers—and to my mind with conclusive force that the adjustments are far from complete, and cannot be completed in regard to wages without disastrous labour disputes. Both sides admit that their conclusions are weakened by the unreliability of the Indian index figures.

The truth, I suggest, lies between these two contentions. There have been very substantial adjustments to one shilling and sixpence; no ratio could be operative for over a year without inducing this result. But it is clear that the adjustments, especially in regard to wages in Western India, are not complete. In the matter of the indebtedness of the agricultural classes of India—seventy per cent. of the whole population there has been no adjustment, not in relation to the land revenue they pay to Government. The ratio therefore cannot be determined as a question of academic principle, but is a matter of expediency.

Here, it seems to me, the decisive factor is the economic consequence of a return to one shilling and fourpence. There is no half-way house; the rate must be either the *de facto* one of one and sixpence, or the old permanent ratio of one and fourpence. The change would be immediate not a matter of weeks or months, but of hours or minutes. There would be an immediate rise in prices of twelve and a half per cent., with a consequent reduction of real wages by that proportion; there would be convulsive disturbance of the foreign trade; there would be violent speculation. I omit all calculation of the effect of the lower rate on the finances of the Government of India, because this is an influence which has been over-valued in the past; it is infinitesimal in comparison with the industrial and commercial interests involved. No-one who realises the sensitiveness of the Indian market, and the proneness to speculation, can contemplate these violent disturbances without a feeling akin to dismay. The balance of advantage lies with stabilisation at one and six; the controversy which must ensue is part of the price to be paid for the neglect to re-establish the permanent ratio when it was practicable.

The Currency Authority.—A feature in the Indian currency system little appreciated in Great Britain is the predominance of the Government. The Commission lay special stress on the disabilities this entails. "India is perhaps the only country, among the great trading countries of the world, in which the Government exercises direct control over currency in general and over the note issue in particular. The banking and currency reserves of the country are thus separated.... The Government controls the currency. The credit situation is controlled, as far as it is controlled at all, by the Imperial Bank."

A volume might be written on this subject and on the controversy, the prejudice, and political harm which it involved. However, there is no useful purpose to be served by raking amongst these ashes, though the curious will find much food for thought in the historical retrospect, drawn entirely from official sources, which forms the first part of Sir Purushotamdas Thakordas's minute of dissent. The Commission propose to establish harmony between these hitherto diverse interests—though there has been a close working arrangement between the Government and the Imperial Bank of recent years, and the Government has developed the note issue with skill and enterprise—by the establishment of a new Reserve Bank. A detailed scheme for the constitution and working of the Bank, understood to be the handiwork of Sir Henry Strakosch, is embodied in the Report. The Reserve Bank, with a capital of five crores of rupees, is to have the sole right

of the Note Issue; the responsibility for maintaining the stability of the currency; the custody of the cash balances of the Government and the duty of carrying through its remittances; it is to act generally as a bank of the banks, and its principal function will be to re-discount bankable bills held by the commercial banks. Subject to the payment of limited dividends and the building up of suitable reserve funds, the balance of the profits is to be paid over to the Government. In return for making over the note issue and the reserves, the Government is to nominate the managing-governor and deputy managing-governor, and three members of the Board—five members from a Board of fourteen. In order to free the Bank from political pressure, the Commission think it desirable to provide that no person shall be appointed President or Vice-President of a Local Board, or shall be nominated as a member of the Central Board, if he is a member of any of the legislatures.

The main principle underlying this recommendation is not open to question. It is of paramount importance to remove the Indian currency system from official management and to link the control of currency with the control of credit. This connotes the establishment of a Central Bank. But it is not the complete essential; far from it.

India is sometimes spoken of as the sink for the precious metals. So long as she chiefly absolved silver the West looked on with benevolent approval; now she is turning to gold the attitude is different. Indian capital is sometimes described as inadequate and timid. But critics do not realise that the banking organisation of the country is so hopelessly inadequate that hundreds of millions of people have no secure refuge for their store of value other than gold and silver bullion in their own possession. The Exchange Bank cling to the seaports. The indigenous banks follow their example. The Imperial Bank is the only organisation which can carry reliable credit facilities into the mofussil. The old Presidency Banks were lamentably slow in exercising this responsibility. The pace has been quickened, and as the price of the free use of the Government balances the Imperial Bank was called upon to open a hundred new branches. The total number of its branches is yet only a hundred and sixty-four, and it was stated by a competent banking authority in evidence before the Commission that India needed at least five thousand.

This extension of banking facilities is of transcendental importance. In an address to the University of Delhi last year Sir Basil Blackett committed himself to a remarkable statement: "To some it may sound fantastic, in view of this historic habit—reliance on external capital—to talk of India's not supplying the whole of her own capital requirements but also becoming a lender of capital for the development of other countries. Yet, I believe firmly that, given the necessary development of banking and credit facilities and goodwill and readiness to profit by the counsel and assistance of European businessmen, the time is not very far distant when India will be doing both these things. India would seem by nature to be destined to be a creditor country, if only her people will it so." But Indian resources will not be mobilised without the vehement development of branch banks.

As matters stand this work can only be done by the Imperial Bank, and though it is moving it is with desperate slowness. There are one or two features common to most of the hundred new branches it has opened. They attract deposits; they facilitate the investment habit; but they do not pay. To many who are in close touch with Indian conditions it seems that any measure which would weaken the capacity of the Imperial Bank to prosecute this unremunerative, but imperatively necessary, work by the diversion of the Government balances to the Indian Reserve Bank, or the division of these balances between the two banks, would be a retrograde measure. There are other considerations. The amount of re-discounting to be done in India is not large, as the Exchange Banks, which finance the export trade, re-discount in London, which is always likely to be the cheaper market. The number of men in India qualified to act on the directorate of banks is small. Are there enough to constitute the reliable directorates for two great banking institutions? The Commission rather gloze over these difficulties. They think that the Reserve Bank will be able to spare for the Imperial Bank sufficient funds from the Government balances to enable it to prosecute the work of opening new branches; also that a bill market will rapidly develop. But their arguments wear an aspect of special pleading. However, the issue can be put in a nutshell. India must have a Central Bank. It is found impossible to develop, even as a temporary measure, the Imperial Bank into a Central Bank, then there must be a Reserve Bank on the lines sketched in the Report. But if a new Reserve Bank is established, it is essential that provision shall be made for the Imperial Bank to enjoy the free use of a sufficient share of the Government balances to enable it vigorously to develop banking facilities in the mofussil and this obligation should be made compulsory.

The Note Issue.—Before the war there was a considerable and growing circulation of sovereigns. On the outbreak of hostilities these disappeared as currency; the actual currency of India is a token, the silver rupees and another token, the note convertible into rupees. Ever since the breakway from the accepted gold standard this obligation has imposed serious difficulties on the currency. It drove it into the very heavy coining which followed recovery from the famine of 1899-1900; it compelled heavy purchases of silver, which invariably rose in prices as the Government came into the market; and it placed the Indian currency system, as occurred during the war, at the mercy of the silver market. The maintenance of the convertibility of the note into silver rupees of the present fineness is only possible so long as silver does not rise above 48*d*. an ounce. The removal of this anomalous provision, the Commission say, is an essential step in Indian currency reform which must be taken sooner or later. "No opportunity for the termination of this obligatory convertibility is likely to be so favourable at the present when, by making the notes convertible into gold bars for all purposes, a more solid right of convertibility is attached

to them than they have ever had since silver ceased to be a reliable standard of value." Both propositions can be accepted in their entirety.

The rise in the volume of the paper currency is one of the most remarkable features in Indian financial history. It developed from no change in the status of the note itself; it was always convertible on demand; but from increased facilities for the encashment of notes, beginning with the introduction of universal notes of small denomination and steadily progressing as experience was gained. We can therefore endorse the conclusion of the Commission that the best way to foster the use of currency notes is to establish confidence in their practical convertibility, "and this confidence has been secured not so much by a legal obligation to encash them at currency offices as by making rupees readily available to the public at centres where there is a demand for them." There has been another factor in popularising the note which commands less attention. The rise in prices made the rupee an unsuitable medium for large commercial transactions, from the bulk and weight of the amount of currency required.

The Commission therefore propose that whilst the legal obligation to convert into rupees all the notes in circulation shall remain, this obligation should not attach to the new notes to be issued by the Central Bank, and coincidentally the one-rupee note, which had acquired great popularity before it was discontinued on the ground of economy, shall be re-issued. The legal obligation on the Central Bank will be to give legal tender money, either notes of smaller denominations or silver rupees, at its option; but it will be the duty of the Bank to supply rupees freely in such quantities as may be required for circulation, and of the Government to furnish the Bank with such coin. The currency position is such that the change in the legal status of the note will be unfelt. India is suffering from a surfeit of rupees, the total volume of which is estimated at approximately Rs. 400 crores. There are Rs. 85 crores of silver coin and bullion in reserve. The whole tendency will be in the direction of a return of rupees to the reserve rather than to an appetite therefor. Not only will there exist the fullest capacity to supply rupees on demand, but there will be a positive inducement to the currency authority to encourage a demand for rupees in order to get rid of its redundant stock. It is clear that the present opportunity of freeing the currency authority from the dependence on the silver market which has hampered India for so many years is exceptionally favourable, and should be seized without hesitation.

The reception of the Report followed very closely the lines indicated as probable in the article in *The Bankers' Magazine* which we have quoted extensively above. There was a considerable protest, strongest in Western India but shared in other parts of the country, against the proposal to stabilise the rupee at one shilling and sixpence and a demand for a reversion to one and fourpence. There was, particularly in Bombay, a reluctance to agree to the establishment of the Reserve Bank, coupled with the desire that the Imperial Bank of India should be re-moulded in order to make it the Central Bank, with the functions proposed to be remitted to the Reserve Bank. These voices were so loud that they overbore the consideration of the basic recommendations of the Report, a true gold standard, and the establishment of an organisation which would link currency with credit. In Bombay there was started a Currency League, with branches in other parts of India, whose main efforts were directed to the ratio, and to the idea that the legal ratio should be one and four, not one and six.

In August 1926 the Government published the text of a Bill designed to fix the ratio at one and six, and to support it by the sale of bullion on the lines laid down in the Report. At the request of a large body of opinion in the Legislative Assembly, which urged that there had not been time to study the Report and that the papers were not available, the discussion of this measure was postponed until the 1927 session. On November 18th the Government of India issued a notification to the following effect:—

"After considering the report of the Royal Commission on Indian Currency and Finance, the Secretary of State for India in Council in agreement with the Government of India, is prepared to accept as a whole the recommendations of the Commission, subject to such further consideration of details as may prove to be necessary. The necessary legislation to give effect to these recommendations will be introduced in the Indian Legislature during the forthcoming session."

The new Ratio.—So far from closing the discussion, this notification intensified it. Feeling ran high on the subject of the ratio, considerable interests in the country being convinced that one shilling and sixpence was a higher rate than the manufacturing and agricultural industries could bear without prolonged and disastrous readjustment. These found strong expression when the Bill to give effect to the new rate was brought before the Legislative Assembly in February-March 1927. The Indian Currency Bill was however accepted by the Assembly by a small majority, and adopted by the Council of State. It established the ratio of one shilling and sixpence by enacting that the Government would purchase gold at a price of twentyone rupees three annas ten pies per tola of fine gold in the form of bars containing not less than forty tolas and would sell gold or, at the option of Government, sterling for immediate delivery in London at the same price after allowing for the normal cost of transport from Bombay to London. A rate of one shilling fivepence fortynine sixty-fourths was notified as Government's selling rate for sterling to meet these obligations.

Exchange has since remained stable at the one and sixpenny rate, but the proposal to establish a Reserve Bank for the control of Currency has not matured owing to differences between the Government and the Legislature as to the exact form of the Bank. Meantime the gold resources of the Government of India have been strengthened, as will be seen when we come to consider the Reserves.

The character of the **Reserves** which are the backbone of the Indian currency system are shown below:—

Composition of the Currency Reserve held against the note circulation at the end of each month (In lakhs of rupees.)

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1927.												
March	1,84,13	95,94	22,32	8,53	..	..	..	..	..	5,57	49,77	2,00
April	1,73,71	95,53	29,76	8,86	..	..	..	..	..	2,10	37,46	..
May	1,71,44	95,20	29,76	8,92	..	..	..	..	..	2,10	35,46	..
June	1,72,57	98,36	29,76	8,99	..	..	..	..	..	..	35,46	..
July	1,77,63	1,03,36	29,76	9,06	..	..	..	..	..	..	35,45	..
August ..	1,80,48	1,06,00	29,76	8,90	..	..	..	..	..	19	35,63	..
September ..	1,81,82	1,07,34	29,76	7,35	..	..	..	..	..	1,02	36,35	..
October ..	1,83,38	1,08,27	29,76	7,31	..	..	..	..	..	1,29	36,75	..
November ..	1,81,55	1,06,33	29,76	7,17	..	..	..	..	..	1,40	36,89	..
December ..	1,82,64	1,01,11	29,76	7,42	..	..	..	..	..	3,43	36,92	4,00
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Details of the balance of the Gold Standard Reserve on the 31st March 1928.

	£
In England—	
Estimated value on the 31st March 1928 of the sterling securities of the nominal value of £37,675,352 (as per details below) ..	37,843,638
Gold ..	2,152,334
Cash at the Bank of England ..	4,028
TOTAL ..	40,000,000

Details of investments :—	Face value. £
British Treasury Bills ..	10,970,000
Treasury 4½ per cent. Bonds, February 1929 ..	2,500,000
Treasury 5½ per cent. Bonds, April 1929 ..	150,000
Treasury 4½ per cent. Bonds, 1929-34 ..	3,375,000
Treasury 5½ per cent. Bonds, May 1930 ..	7,500,000
Treasury 4½ per cent. Bonds, 1930-32 ..	3,765,000
Treasury 4 per cent. Bonds, 1931-33 ..	5,474,000
Treasury 5 per cent. Bonds, 1933-35 ..	3,000,000
National 5 per cent. War Loan 1929-47 Stock ..	941,352
TOTAL ..	37,675,352

THE RESERVE BANK.

An essential part of the scheme formulated by Currency Commission was the formation of a Reserve Bank, to take over the Note Issue, custody of the Government remittances, and act as a true banker's bank. The Commission pointed out that India was one of the few great countries where the control of currency was divorced from the control of credit, and where Government carried out immense financial transactions through its own agency, and propose the Reserve Bank as the apex of the new financial system.

The Government accepted these recommendations, and in January 1927 introduced a Bill to give effect to the Commission's advice. They proposed a shareholders' bank, with a commercial directorate tempered by Government nominees, and a new agreement with the Imperial Bank freeing it from some of the restrictions imposed. The Bill was referred to a Select Committee, when a marked deivergence of opinion was manifested. A majority of the Committee carried recommendations for the transference of a shareholders' bank into a State Bank, with a strong element of directors selected by the legislatures. This changed Bill was before the legislature in September, and was withdrawn by the Government for further consideration, it being understood that the Secretary of State for India objected to the drastic changes made in the original scheme.

These objections to the original scheme have been summarised under the following heads. That a Reserve Bank in charge of the credit and currency should be responsible to the legislature; that only a State Bank would carry the confidence of the people; that a Reserve Bank does not require much capital, and therefore there was no need to create a body of shareholders; and that if a bank with share capital was created, there was the risk of it falling under the domination of foreign capitalists, or of Indian capitalists in the big cities.

The real ground of objection was the first; the legislature sought to make the Bank responsible to the legislature; that opened the great question whether the Reserve Bank should be commercial or political.

The New Bill.—After conferring with the authorities in London, the Finance Member published in January 1928 the draft of an entirely new Bill. On the main point it was uncompromising. It provided for a shareholders' bank, with a capital of five crores of rupees, and it entirely excluded political interest in the management by stipulating that members of the legislatures were precluded from becoming directors. On all other points it sought to meet the objections to the original scheme. The provisions in this respect governed the directorate and the qualifications for shareholders. As these are important they are set out here :—

The Shareholders.—(1) The original share capital of the Bank shall be five crores of rupees divided into shares of one hundred rupees each, which shall be fully paid up.

(2) No amount in excess of twenty thousand rupees shall be issued to any one person or to any two or more persons jointly, and no person shall be allowed to acquire an interest in the share capital of the Bank, whether held in his own right, or held jointly with others, or held partly in his own right and partly jointly with others, to a value in excess of twenty thousand rupees.

(3) Separate registers of shareholders shall be maintained at Bombay, Calcutta, Madras, Rangoon and Delhi, and a separate issue of shares shall be made in each of the areas served by those registers, as hereinafter defined, and shares shall not be transferable from one register to another save in accordance with conditions to be prescribed by the Governor-General in Council.

(4) A shareholder shall be qualified to be registered as such in any area in which he is ordinarily resident or has his principal place of business in India, but no person shall be registered as a shareholder in more than one register or as a holder of an interest in the share capital of a total nominal value exceeding twenty thousand rupees; and no person who is not—

(*a*) domiciled in India, or

(*b*) a British subject ordinarily resident in India, or

(*c*) a company registered under the Indian Companies Act, 1913, or a society registered under the Co-operative Societies Act, 1912, or a scheduled bank, or a corporation or company incorporated by or under an Act of Parliament or any law for the time being in force in any of His Majesty's dominions and having a branch in British India, shall be registered as a shareholder or be entitled to payment of any dividend on any share.

Management.—The essential clauses of the Bill relating to the management of the Bank are :—

The general superintendence of the affairs and business of the Bank shall be entrusted to a Board of Directors which may exercise all powers and do all such acts and things as may be exercised or done by the Bank and are not by this Act expressly directed or required to be done by the Bank in general meeting.

Save as expressly provided in this Act —(*a*) no person may be a Director who is not or has not at some time been—(*i*) actively engaged in agriculture, commerce, finance or industry, or (ii) a director of any company as defined in clause (2) of section 2 of the Indian Companies Act, 1913, or of a corporation or company incorporated by or under any law for the time being in force in any place outside British India: and (*b*) no person may be a Director who is—(i) a government official, or (ii) an officer or employee of any bank or (iii) a director of any bank, other than a registered society as defined in clause (e) of section 2 of the Co-operative Societies Act, 1912.

The election or appointment as Director of any person who is a member of the Indian Legislature or of a local Legislature shall be void, unless within one month of the date of his election or appointment he ceases to be such member, and if any Director is elected or nominated as member of any such Legislature he shall cease to be a Director as from the date of such election or nomination, as the case may be.

The Board shall consist of the following Directors, namely :—(*a*) a Governor and two Deputy Governors to be appointed by the Governor-General in Council after consideration of any recommendation made by the Board in that behalf; (*b*) four Directors to be nominated by the Governor-General in Council; (*c*) two Directors to be elected by the Associated Chambers of Commerce; (*d*) two Directors to be elected by the Federation of the Indian Chambers of Commerce; (*e*) one Director, representing the interest of agriculture to be elected by provincial co-operative banks holding shares to the nominal value of not less than five thousand rupees; (*f*) eleven Directors to be elected on behalf of the shareholders on the various registers; (*g*) one government official to be nominated by the Governor-General in Council.

The shareholders registered on the various registers shall elect delegates for the purpose of electing Directors to represent them on the Board, and the numbers of delegates shall be as follows, namely:—(*a*) for the Bombay register—twenty-four members; (*b*) for the Calcutta register—twenty-four members; (*c*) for the Madras register—ten members; (*d*) for the Rangoon register—ten members; (*e*) for the Delhi register—twenty-four members.

The election of delegates for the shareholders on a register shall be held once in every five years, at a convenient time before the expiry of the term of office of the retiring Directors for the election of whose successors the delegates are to be elected.

(5) Delegates shall hold office for a period of five years.

Reception of the Bill.—When the Bill was published many of those who were opposed to the original scheme seemed to be chary of committing themselves to an opinion. But the general attitude may be fairly indicated in these terms. By those who accepted the idea of a shareholders' bank, the Bill was regarded as a considerable improvement, inasmuch as it safeguarded the country against either alien or capitalist control, and gave every part of the country, and every important interest, representation on the directorate. Those who wanted a State, or in other terms a political bank, stood fast in their opposition, and objected the scheme root and branch. There was the further criticism that the original Bill having passed through Select Committee, and been discussed in the legislature, it was unconstitutional to withdraw it and substitute a fresh measure; the correct procedure, they maintained, was for the original Bill, as amended by the Select Committee and the legislature to be proceeded with. The Bill failed to secure the support of the Legislature and was withdrawn.

Agriculture.

As crops depend on the existence of plant food and moisture in the soil, so the character of the agriculture of a country depends largely on its soil and climate. It is true that geographical situation, the character of the people and other considerations have their influence which is not inconsiderable, but the limitations imposed by the nature of the soil and above all by the climate tend to the production of a certain class of agriculture under a certain given set of conditions.

The climate of India, while varying to some extent in degree, in most respects is remarkably similar in character throughout the country. The main factors in common are the monsoon, the dry winter and early summer months, and the intense heat from March till October. These have the effect of dividing the year into two agricultural seasons, the *Kharif* or Monsoon and the *Rabi* or Winter Season each bearing its own distinctive crops. Between early June and October abundant rains fall over the greater part of the continent while the winter months are generally dry, although North-Western India benefits from showers in December and January. The south of the Peninsula, and especially the Madras Presidency, however, is more truly tropical especially in the south, and depends mainly on the N.-E. monsoon; here the two crop seasons can hardly be said to exist. The distribution of the rainfall throughout the year, which is of considerable importance to agriculture, is none too favourable, but is not quite so bad as is often represented. The rainfall is greatest at what would otherwise be the hottest time of the year, *viz.*, mid-summer, and when it is most needed. It should be remembered that in a hot country intermittent showers are practically valueless as evaporation is very rapid. Heavy rainfall concentrated in a limited period, though it has its drawbacks and demands a special system of agriculture, has many advantages in hot countries.

Soils.—Four main soil types can be recognised in India, *viz.*, (1) the Red soils derived from rocks of the Archæan system which characterise Madras, Mysore and the South-East of Bombay and extend through the East of Hyderabad and the Central Provinces to Orissa, Chota Nagpur and the South of Bengal. (2) The black cotton or *regur* soils which over-lie the Deccan trap and cover the greater part of Bombay, Berar and the Western parts of the Central Provinces and Hyderabad with extensions into Central India and Bundelkhand. The Madras *regur* soils though less typical are also important. (3) The great alluvial plains, agriculturally the most important tract in India as well as the most extensive, mainly the Indo-Gangetic Plain embracing Sind, northern Rajputana, most of the Punjab, the plains of the United Provinces, most of Bihar and Bengal and half of Assam. (4) The laterite soils which form a belt round the Peninsula and extend through East Bengal into Assam and Burmah.

The great alluvial plains are characterised by ease of cultivation and rapid response to irrigation and manuring; broadly speaking there are few soils in the world more suited to intensive agriculture so long as the water supply is assured. The other soils are less tractable and call for greater skill in management and are less adapted to small holdings; of these the *regur* soils are the most valuable.

Agricultural Capital and Equipment.—India is a country of small holdings and the commonest type is that which can be cultivated with one pair of bullocks under local conditions. Large holdings are practically unknown, and are mainly confined to the planting industries. Farming is carried on with a minimum of capital, there being practically no outlay on fencing, buildings, or implements. The accumulation of capital is prevented by the occurrence of famine and the high rate of interest, and extravagance of expenditure in marriage celebrations. The organization of co-operative credit which has been taken in hand by Government and which has already proved successful in many provinces will undoubtedly lead to an increase in Agricultural capital.

Equipment.—For power the ryot depends chiefly on cattle which, as a rule, are light and active but possess little hauling power. The necessary tilth for crops is brought about by frequency of ploughings, the result being that the soil is seldom tilled as it should be This is not chiefly due to want of knowledge on the part of the people but through want of proper equipment. The Indian agriculturist, as a rule, possesses an intimate though limited knowledge of the essentials of his own business, and fails, not only through ignorance, but also through lack of ways and means.

Implements are made of wood although ploughs are usually tipped with iron points, and there is a great similarity in their shape and general design. The introduction of iron ploughs has made much progress in the last few years and many hundred thousand are now in use. The levelling beam is used throughout the greater part of the country in preference to the harrow and roller; and throughout Northern India the plough and the levelling beam are the only implements possessed by the ordinary cultivator.

On black cotton soils the commonest implement is the *bakhar*, a simple form of broad-shape plough. Seed drills and drill hoes are in use in parts of Bombay and Madras but throughout the greater part of the country the seed is either broadcasted or ploughed in. Hand implements consist of various sizes of hoes, the best known of which are the *kodal* or spade with a blade set at an angle towards the labourer who does not use his feet in digging, and the *khurpi* or small hand hoe. Of harvesting machinery there is none; grain is separated either by treading out with oxen or beating out by hand, and winnowing by the agency of the wind.

Cultivation.—Cultivation at its best is distinctly good but in the greater part of the country it has plenty of room for improvement. As in any other country success in agriculture varies greatly with the character of the people, depending largely as it does on thrift and industry. In most places considering the large population cultivation is none too good. Agriculture suffers through lack of organization and equipment. Owing to the necessity of protection against thieves, in most parts the people live in villages, many of them at considerable distances from their land. Again, holdings, small though they are, have become sub-divided by the Indian laws of inheritance without any regard for convenience, although very definite attempts are now being made by some of the Provincial Governments to remedy this evil by new legislation. For *Rabi* crops which demand a fine seed-bed preparatory tillage consists mainly of repeated treatments with the indigeneous plough (or on black soils the *Bakhar*) which serves the purpose of plough, harrow and cultivator, combined with applications of the levelling beam. Crude as these implements are they produce in Northern India a surface mulch and moist sub-soil which is the aim of all dry-farming operations. For *Kharif* crops the preparation is much less thorough as it is essential to sow without delay. Interculture is usually inadequate. Manure is generally applied to more valuable crops like sugarcane, cotton, tobacco, etc. Seeding is either done broadcast or by drilling behind a wooden plough or drill. Thinning and spacing are not nearly so well done as they might be, and intercultivation is generally too superficial. Harvesting is done by sickle where the crops are cut whole, and there is little waste involved. On the whole the methods of the ryot if carried out thoroughly would be quite satisfactory, but it is doubtful if this could be done with the number and quality of cattle at his disposal.

Irrigation is necessary in order to grow full crops on the land, over a large part of the country owing to insufficient rainfall and the vagaries of the monsoon. Canal irrigation has been greatly extended over the Punjab, Sind, United Provinces and Madras through Government canals which, in addition to securing the crops over existing cultivated land, have converted large desert tracts into fertile areas. The Punjab and parts of the United Provinces are naturally well suited to canal irrigation owing to the frequency of their rivers. The water is generally taken off at a point a little distance from where the rivers leave the hills and is conducted to the arid plains below. The main canal splits up into diverging branches, which again subdivide up into distributaries from which the village channels receive their supplies. Water rates are levied on the matured areas of crops, Government thus bearing a part of the loss in case of failure. Much of the land is supplied by what is termed flow irrigation, *i.e.*, the land is directly commanded by the canal water, but a great deal has to be lifted from one to three feet the canal running in such cases below the level of the land. Rates for lift irrigation are, of course, lower than those for flow.

Irrigation canals are generally classed into (1) perennial and (2) inundation canals. Perennial canals, which give supplies in all seasons generally have their headworks near the hills, thus commanding a great range of country. Farther from the hills, owing to the very gradual slope of the land and the lowness of the rivers in the cold weather, perennial irrigation is difficult and inundation canals are resorted to. These canals only give irrigation when the rivers are high. As a rule, in Northern India they begin to flow when the rivers rise owing to the melting of the snow on the hills in May and dry up in September.

At the present time the Bombay Presidency possesses the most spectacular irrigation schemes in India—if not in the world. The Lloyd Dam at Bhatgar, 190 feet high, will have the greatest cubical contents of any masonry wall in the world; the Wilson Dam at Bhandardara, impounding 272 feet of water, is far and away the highest dam in India, whilst the Sukkur Barrage in Sind across the Indus will irrigate a desert whose area far exceeds that of any other scheme conceived by engineers.

Irrigation from Wells.—About one quarter of the total irrigation of the country is got from lifting water from wells ranging in depth from a few feet to over fifty feet. Their numbers have greatly increased in recent years largely through Government advances for their construction. The recurring cost of this form of irrigation has, however, greatly increased owing to the high price of draught cattle and the increasing cost of their maintenance.

All Agricultural departments are now giving increased attention to the better utilisation of underground water supplies, existing wells being improved by boring and tube wells of large capacity installed and equipped with pumping machinery.

Tank irrigation is common in Central and Southern India. Large quantities of rain water are stored in lakes (or tanks) and distributed during the drier seasons of the year. Often the indirect effect of the tank in maintaining the sub-soil water level is as important as the direct irrigation.

Manures.—Although the number of cattle maintained in India is very high and indeed excessive, there is everywhere a shortage of farm-yard manure. This is partly due to the small use of bedding, for which straw can ill be spared, and to the keeping of cattle in the open but mainly to the use of dung as the principal source of village fuel. Hence the supply of organic matter to Indian soils is deficient. Unfortunately the Indian cultivator does not possess the skill of the Chinaman in the making of composts and much valuable manurial material is wasted in every Indian village and to the detriment of sanitation. Green-manure crops are spreading slowly and the use of oil-cakes, especially castor-cake, for the more valuable crops like sugarcane and tobacco is increasing.

Though much of the cultivated land in India is naturally fertile, the soil over large areas has been impoverished as a result of its being cropped year after year without manure. Various kinds of natural and artificial manures have been tested on Government farms and a small demand for them created by demonstrating their use in villages. The demand for artificial fertilizers is on the increase, and although a large portion of them goes to tea and coffee plantations, larger quantities are now being applied also to such valuable crops as sugarcane, cotton and tobacco. The chief artificial fertilisers now in use are sulphate of ammonia, nitrate of soda, and soluble phosphate fertilisers.

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For transplanted rice the soil is generally prepared after the arrival of the monsoon and is worked in a puddle before the seedlings are transplanted. The land is laid out into small areas with raised partitions to regulate the distribution of the water supply. The seedlings are planted in small bunches containing from 4 to 6 plants each and are simply dibbled into the mud at distances of 6 to 12 inches apart. Where available, irrigation water is given at frequent intervals and the fields are kept more or less under water until the crop begins to show signs of ripening.

Wheat.—Wheat is grown widely throughout Northern India as a winter crop, the United Provinces and the Punjab supplying about two-thirds of the total area, and probably three-quarters of the total outturn in India. The majority of the varieties grown belong to the species *Triticum vulgare*. Indian wheats are generally white, red and amber coloured and are mostly classed as soft from a commercial point of view. As seen in local markets Indian wheats frequently contain appreciable quantities of other grains and even of extraneous matter due to the method of threshing employed. Wheat for export is well-cleaned and there has been great improvement in this respect of recent years. Most of the Indian wheats are soft weak wheats but there are some well known Maccaroni wheats amongst them. Indian wheat at present meets a special demand on the London market being available when other stocks of soft wheats are low. Strong wheats of high milling quality are grown on a considerable scale in Northern India as the result of the work of the Agricultural Departments but are mainly retained for local consumption. Exports of wheat during the last 30 years have varied from *zero* to over 2 million tons, most of the annual production of some 10 million tons is always consumed in the country; indeed each rise in exports has been simultaneous with the opening up of a new canal colony. The crop is generally grown after a summer fallow and, except in irrigated tracts, depends largely on the conservation of the soil moisture from the previous monsoon. Rains in January and February are generally beneficial but an excess of rainfall in these months usually produces rust with a diminution of the yield. On irrigated land 2 to 4 waterings are generally given. The crop is generally harvested in March and April and the threshing and winnowing go on up till the end of May. In good years the surplus crop is bought up at once by exporters and no time is lost in putting it on the European market as other supplies are at that time of year scarce. In years of low yield the local price is sufficiently high to restrict exports.

The Millets.—These constitute one of the most important group of crops in the country, supplying food for the poorer classes and fodder for the cattle. The varieties vary greatly in quality, height and suitability to various climatic and soil conditions. Perhaps the two best known varieties are Jowar (*Sorghum vulgare*) the *great* millet, and Bajra the Bulrush millet (*Pennisetum typhoideum*). Generally speaking the jowars require better land than the bajras and the distribution of the two crops follows the quality of the soil. Neither for jowar nor bajra is manure usually applied though Jowar responds handsomely to high manuring and cultivation is not so thorough as for wheat. The crop is generally sown in the beginning of the monsoon and so it requires to be thoroughly weeded. In the case of jowar, however, very large areas are sown as a *rabi* crop. It is often grown mixed with the summer pulses especially *Arhar* (*Cajanus indicus*—pigeon pea) and other crops. The subsidiary crops are harvested as they ripen either before the millet is harvested or afterwards. The produce is consumed in the country.

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equipment. A part of the cost was met from a sum of £30,000 placed at Lord Curzon's disposal by Mr. Phipps, an American visitor to India. This example of munificence has recently been followed by Sir Sassoon J. David, who placed the sum of £53,300 at the disposal of the Government of Bombay for the establishment of vernacular agricultural schools and the improvement of agricultural methods, in commemoration of the visit of Their Imperial Majesties to India.

Prior to 1921, the policy of agricultural development in India as a whole was guided by the Government of India, but with the inception of the Reforms in 1921, agriculture became a transferred subject and provincial Governments were granted autonomy in respect of the policy of agricultural development in their provinces. The Central Government, however, still concerns itself with agricultural problems of All-India importance and maintains the following institutions under the administrative control of the Agricultural Adviser to the Government of India:—(1) the Agricultural Research Institute, Pusa; (2) the Imperial Institute of Veterinary Research, Muktesar; (3) and (4) the Imperial Institutes of Animal, Husbandry and Dairying, Bangalore and Wellington; (5) the Imperial Cattle Breeding Farm, Karnal; (6) the Creamery at Anand; (7) the Imperial Cane breeding Station, Coimbatore; and (8) the Sugar Bureau, Pusa.

The Indian Central Cotton Committee with its research institutes at Bombay and Indore and its Provincial research schemes and other activities is financed from the proceeds of the cotton cess which though levied under an Act of the Central Legislature is independently administered.

The net annual expenditure of the Imperial Department of Agriculture is about Rs. 9,50,000 or about £ 70,000 while that of the Provincial Departments of Agriculture is Rs. 94,00,000 or about £ 705,000. The total net expenditure of the agricultural departments in India is therefore about £ 775,000 or about one half penny per acre per annum.

Recent Progress.—A survey of the results of the activities of the Agricultural Department—including the Central Research Institute at Pusa and the Provincial departments in relation to the chief crops of India shows valuable results. Of all the grain crops of India, rice stands first in importance and its yield is a vital factor in the welfare of the land. All Agricultural Departments have devoted considerable attention to this crop and the area under improved varieties has now reached 882,000 acres.

Wheat is the next important crop. The types evolved by the Agricultural Departments possessing high yielding and rust resisting qualities and good milling and baking properties are becoming very popular all over the land. The total area under improved wheats (Pusa and Provincial types) now exceeds 2½ million acres. Some of the new series of bearded wheats evolved at Pusa for tracts of country where the crop is liable to damage by birds possess equally satisfactory milling and baking qualities and yield as heavily as the popular Pusa wheat (12 and 4).

With a view to meeting India's requirements of refined sugar, which are greater than her production, the Agricultural Department is vigorously experimenting on high yielding canes. Some of the new varieties evolved at Coimbatore Cane Breeding Station are doing remarkably well and Coimbatore 210, 213 and 214, the demand for which far exceeds supply, have well established their superiority over the old indigenous canes. Experiments are also, with the aid of the Indian Sugar Producers' Association, being made with field and factory tests on all the more promising seedlings.

The Indian Central Cotton Committee, representative of all branches of cotton growing, manufacturing and trading interests, is co-operating with the Departments of Agriculture in the Provinces and with allied institutions, to which it has given grants-in-aid for the investigation of scientific problems relating to cotton. It has also established a Technological Laboratory, including an experimental spinning plant and research laboratory in Bombay. The laboratory will, it is hoped, prove of great value to cotton workers in furnishing accurate information regarding the spinning qualities of new strains.

The Agricultural Department have selected strains of jute which maintain their superiority over the older varieties used by the cultivators and they are rapidly spreading. The area under these strains now exceeds 500,000 acres.

The Department has been experimenting in the selection of a tobacco plant which will result in an increase in the outturn of the better qualities of Indian cigars and cigarettes and thus assist home grown tobacco better to hold its own in competition with imported cigars, tobacco and cigarettes.

Departmental investigations have meanwhile been conducted in regard to the reclamation of saline lands, the conservation of soil moisture, the movement of nitrates in the soil, the storage of farmyard manure, the efficiency of different methods of green manuring, the solubilization of mineral phosphates, the control of insect pests and diseases of crops and problems relating to animal nutrition.

Improvements are being attained by the Department in the indigenous milk breeds of cattle by better feeding and selective breeding and by crossing indigenous breeds with the famous milch breeds of Ayrshire and Holstein. Sterilised milk is now being carried over distances up to 1,000 miles and should the experiments being made in this connection prove successful it will open a new vista of possibilities for the dairy industry in India. Much attention is being paid to the question of cattle feeding. For instance, extensive trials have been made with different methods of storing silage. Public interest in dairying and cattle breeding appears to be growing throughout India.

The introduction of improved tillage implements from the West has already done much to raise the standard of farming in India and work in this direction is being pressed forward. Thousands of improved implements are now to be seen in the countryside. A great difficulty in the introduction of improved drills, mowing

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best irrigated tracts the normal yield is about 200 lbs. of ginned cotton per acre and yields much above these have been recorded whilst in the poorest unirrigated tracts 60 lbs. per acre is a good crop. Of recent years, as the result of the work of the Agricultural Departments and the Indian Central Cotton Committee, the quality and yield of the staple cottons has improved and also the yield and cleanliness of the short-staple tracts.

The Cotton Transport Act, the Cotton Ginning and Pressing Factories Act and the Bombay Cotton Markets Act have all been passed at the instance of the Committee and are doing much to check the abuse of adulteration and promote better marketing. Agricultural Departments have continued their campaign of cotton improvement and, apart from improvements in methods of cultivation, improved varieties of cotton now covers over 3½ million acres.

Exports.—The exports of raw cotton from India by sea to foreign countries in the last five cotton years (September to August) were as follows (in thousand bales of 400 lbs. each):—

Countries.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
	Bales (1,000)	Bales (1,000)	Bales (1,000)	Bales (1,000)	Bales (1,000)
United Kingdom.	223	288	216	153	85
Germany ..	245	209	230	153	204
Belgium ..	234	257	238	210	159
France ..	130	173	180	175	112
Spain ..	62	136	60	71	53
Italy ..	309	602	482	388	272
China ..	376	243	355	521	253
Japan ..	1,759	1,384	2,101	1,995	1,582
Other Countries	135	158	136	109	110
TOTAL ..	3,473	3,450	3,998	3,775	2,830

The exports for the seven months of the season 1927-28, *i.e.*, from September 1927 to March 1928, amounted to 1,637,000 bales, as compared with 1,781,000 bales in the corresponding period of the previous year.

Sugarcane.—Although India is not naturally as well suited for sugarcane growing as many other tropical countries, some 3½ millions of acres are annually sown. The crop is mostly grown in the submontane tracts of Northern India. The common varieties are thin and hard, yielding a low percentage of juice of fair quality, but cane of the highest quality and yield is grown in South India. In India white sugar is not made by the grower who simply boils down the juice and does not remove the molasses. The product called gur or gul is generally sold and consumed as such, although in some parts a certain amount of sugar-making is carried on by the old indigenous processes. The production of sugar and *gur* by indigenous methods exceeds 3 million tons annually.* Modern sugar factories, mainly situated in Bihar and the United Provinces, produce some 90,000 tons of white sugar annually as compared to an annual import of 700,000 to 800,000 tons of white sugar. Despite a heavy protective tariff Indian sugar factories still have some difficulty in competing with the imported product, their main difficulties being the scattered nature of the cane cultivation and low yields of poor quality cane. The latter disadvantage is rapidly being reduced by the large-scale introduction of new seedling canes from the Imperial Sugarcane breeding station at Coimbatore, the best of these seedlings are very satisfactory both in tonnage and quality.

Oilseeds.—The crops classified under this heading are chiefly sesamum, linseed and the cruciferous oilseeds (rape, mustard, etc.) Although oilseeds are subject to great fluctuation in price and the crops themselves are more or less precarious by nature—they cover an immense area.

Linseed requires a deep and moist soil and is thus grown chiefly in Bengal, Bihar, the United Provinces and the Central Provinces. The crop is grown for seed and not for fibre and the common varieties are of a much shorter habit of growth than those of Europe: The yield viries greatly from practically nothing up to 500 or 600 lbs. of seed per acre. The seed is mainly exported whole but a certain amount of oil pressing is done in the country.

Sesamum or (Gingelly) is grown mostly in Peninsular India as an autumn or winter crop. The seed is largely exported.

The Cruciferous Oilseeds form an important group of crops in Northern India where they grow freely and attain a fair state of development. They are one of the most useful crops in the rotation. They occupy the land for a few months only, and owing to their dense growth leave the soil clean and in good condition after their removal. A number of varieties are grown differing from each other in habit of growth, time of ripening, and size and quality of seed. The best known are rape, toria, and sarson. The crop is generally sown in September or early October and harvested from December to February. The crop is subject to the attack of aphis (green fly) at the time of flowering and sometimes suffers considerable damage from this pest. The seed is subject to injury from rain and great care has to be taken in the drying. The produce is largely exported whole, but there is a considerable amount of local oil-pressing—the cake being in demand for feeding purposes.

Jute.—Two varieties of the plant are cultivated as a crop, Capsularis and Olitorius. Jute growing is confined almost entirely to Bengal, Assam, Bihar and Orissa. The crop requires a rich moist soil. Owing to river inundation this part of India receives a considerable alluvial deposit every year and the land is thus able to sustain this exhausting crop without manure. The crop is rather delicate when young, but once established requires no attention, and grows to a great height (10 to 11 feet). Before ripening the crop is cut and retted in water. After about three weeks submersion the fibre is removed by washing and beating. At the recent high range of prices jute may be considered to have been, for the last few years, the best paying crop in India.

Tobacco is grown here and there all over the country chiefly, however, in Bengal, Bihar, Bombay, Madras and Burma. Of two varieties cultivated *Nicotiana Tabacum* is by far the most common. Maximum crops are obtained on deep and moist alluvium soils and a high standard of cultivation including liberal manuring is necessary. The crop is only suited to small holdings where labour is plentiful as the attention necessary for its proper cultivation is very great. The seed is germinated in seed beds and the young plants are transplanted when a few inches high, great care being taken to shield them from the sun. The crop is very carefully weeded and hoed. It is topped after attaining a height of, say, 2 ft., and all suckers are removed. The crop ripens from February onwards and is cut just before the leaves become brittle. The greater part of the tobacco grown in India is intended for *Hookah* smoking and is coarse and heavy in flavour. Lighter kinds are also produced for cigar and cigarette manufacture and there is every prospect of this crop becoming increasingly important in the future as the result of successful work by the Agricultural Departments.

Live-stock consist mainly of cattle, buffaloes and goats, horses not being used for agricultural purposes. Sheep are of secondary importance.

For draught purposes cattle are in more general use than buffaloes especially in the drier parts of the country, but buffaloes are very largely used in the low lying rice tracts. For dairying buffaloes are perhaps more profitable than cows as they give richer milk and more of it: but they require more feeding. The poorer people depend largely on the milk of goats of which there are an enormous number throughout India. Cattle breeding is carried on mainly in the non-cultivated tracts in Central and Southern India, Southern Punjab and Rajputana, where distinct breeds with definite characters have been preserved. The best known draught breeds are Hansi, Nellore, Amritmehal, Gujrat, Malvi, and the finest milk cows are the Saniwal (Punjab) Gir (Kathiawar) and Sind. Owing, however, to the encroachment of cultivation on the grazing areas well-bred cattle are becoming scarce and some of the breeds are threatened with extinction. Efforts to improve the quality of the cattle in the non-breeding districts by the use of selected bulls have hitherto been frustrated by the promiscuous breeding which goes on in the villages.

The Government of India and all the Provincial Governments have now, however, turned their attention to the great problem of cattle breeding and have instituted a number of special farms where high-class stud animals are kept. In most cases these bulls are sent into villages to serve cows free on the one condition that the progeny are not allowed to deteriorate and that details of their history are given to the superintendent of the farm. Cattle-breeding, however, is naturally a very slow process and so, no appreciable improvement in the draught and milch animals of the country can be expected for many years, even though the official and non-official schemes now in operation continue to be as enthusiastically received in the villages as they are at present.

Dairying.—Though little noticed, dairying forms a very large indigenous industry throughout India. The best known products are native butter (ghee) and cheese (dahi). During recent years a considerable trade in tinned butter has sprung up in Gujrat (Bombay Presidency). While pure *ghee* and milk can be procured in the villages, in the towns dairy products can scarcely be bought unadulterated. The Government of India have opened an up-to-date Creamery and Butter Factory at Anand and an Institute of Animal Husbandry and Dairying at Bangalore where students are given courses for the Indian Dairy Diploma.

AGRICULTURAL PROGRESS.

The Agricultural Departments in India as they now exist may be said to be a creation of the last twenty years. There have for a good many years past been experimental farms, under official control, in various parts of India, but they were in the past to a large extent in the hands of amateurs, and the work of the Agricultural Departments, with which all the major provinces were provided by about 1884, was in the main confined to the simplification of revenue settlement procedure and the improvement of the land records system. In 1901 the appointment of an Inspector-General of Agriculture gave the Imperial Agricultural Department for the first time an expert head, and placed the Government of India in a position to enlarge the scope of their own operations and to co-ordinate the work being done on independent lines in various provinces. At that time the staff attached to the Government of India consisted of an Agricultural Chemist and a Cryptogamic Botanist, while trained Deputy Directors of Agriculture were employed only in Madras, Bombay and the United Province and the Economic Botanist in Madras was the only provincial representative of the more specialised type of appointments. Within the next few years a number of new appointments were made, so that by March 1905 there were altogether 20 sanctioned agricultural posts; of these, seven were Imperial, including a number of specialist appointments attached to the Agricultural Research Institute and College, the establishment of which at Pusa in Bengal was sanctioned in 1903. A great impetus was given to the development of the Agricultural Departments by the decision of the Government of India in 1905 to set apart a sum of 20 lakhs (£133,000) a year for the development of agricultural experiment, research, demonstration and instruction. Their ultimate aim, as then expressed, was the establishment of an experimental farm in each large tract of country in which the agricultural conditions are approximately homogeneous, to be supplemented by numerous small demonstration farms; the creation of an agricultural college teaching up to a three years' course in each of the larger provinces: and the provision of an expert staff in connection with these colleges for purposes of research as well as education. The eventual cost, it was recognised, would largely exceed 20 lakhs a year. The Pusa Research Institute and College alone has cost nearly £150,000 including

equipment. A part of the cost was met from a sum of £30,000 placed at Lord Curzon's disposal by Mr. Phipps, an American visitor to India. This example of munificence has recently been followed by Sir Sassoon J. David, who placed the sum of £53,300 at the disposal of the Government of Bombay for the establishment of vernacular agricultural schools and the improvement of agricultural methods, in commemoration of the visit of Their Imperial Majesties to India.

Prior to 1921, the policy of agricultural development in India as a whole was guided by the Government of India, but with the inception of the Reforms in 1921, agriculture became a transferred subject and provincial Governments were granted autonomy in respect of the policy of agricultural development in their provinces. The Central Government, however, still concerns itself with agricultural problems of All-India importance and maintains the following institutions under the administrative control of the Agricultural Adviser to the Government of India:—(1) the Agricultural Research Institute, Pusa; (2) the Imperial Institute of Veterinary Research, Muktesar; (3) and (4) the Imperial Institutes of Animal, Husbandry and Dairying, Bangalore and Wellington; (5) the Imperial Cattle Breeding Farm, Karnal; (6) the Creamery at Anand; (7) the Imperial Cane breeding Station, Coimbatore; and (8) the Sugar Bureau, Pusa.

The Indian Central Cotton Committee with its research institutes at Bombay and Indore and its Provincial research schemes and other activities is financed from the proceeds of the cotton cess which though levied under an Act of the Central Legislature is independently administered.

The net annual expenditure of the Imperial Department of Agriculture is about Rs. 9,50,000 or about £ 70,000 while that of the Provincial Departments of Agriculture is Rs. 94,00,000 or about £ 705,000. The total net expenditure of the agricultural departments in India is therefore about £ 775,000 or about one half penny per acre per annum.

Recent Progress.—A survey of the results of the activities of the Agricultural Department —including the Central Research Institute at Pusa and the Provincial departments in relation to the chief crops of India shows valuable results. Of all the grain crops of India, rice stands first in importance and its yield is a vital factor in the welfare of the land. All Agricultural Departments have devoted considerable attention to this crop and the area under improved varieties has now reached 882,000 acres.

Wheat is the next important crop. The types evolved by the Agricultural Departments possessing high yielding and rust resisting qualities and good milling and baking properties are becoming very popular all over the land. The total area under improved wheats (Pusa and Provincial types) now exceeds 2½ million acres. Some of the new series of bearded wheats evolved at Pusa for tracts of country where the crop is liable to damage by birds possess equally satisfactory milling and baking qualities and yield as heavily as the popular Pusa wheat (12 and 4).

With a view to meeting India's requirements of refined sugar, which are greater than her production, the Agricultural Department is vigorously experimenting on high yielding canes. Some of the new varieties evolved at Coimbatore Cane Breeding Station are doing remarkably well and Coimbatore 210, 213 and 214, the demand for which far exceeds supply, have well established their superiority over the old indigenous canes. Experiments are also, with the aid of the Indian Sugar Producers' Association, being made with field and factory tests on all the more promising seedlings.

The Indian Central Cotton Committee, representative of all branches of cotton growing, manufacturing and trading interests, is co-operating with the Departments of Agriculture in the Provinces and with allied institutions, to which it has given grants-in-aid for the investigation of scientific problems relating to cotton. It has also established a Technological Laboratory, including an experimental spinning plant and research laboratory in Bombay. The laboratory will, it is hoped, prove of great value to cotton workers in furnishing accurate information regarding the spinning qualities of new strains.

The Agricultural Department have selected strains of jute which maintain their superiority over the older varieties used by the cultivators and they are rapidly spreading. The area under these strains now exceeds 500,000 acres.

The Department has been experimenting in the selection of a tobacco plant which will result in an increase in the outturn of the better qualities of Indian cigars and cigarettes and thus assist home grown tobacco better to hold its own in competition with imported cigars, tobacco and cigarettes.

Departmental investigations have meanwhile been conducted in regard to the reclamation of saline lands, the conservation of soil moisture, the movement of nitrates in the soil, the storage of farmyard manure, the efficiency of different methods of green manuring, the solubilization of mineral phosphates, the control of insect pests and diseases of crops and problems relating to animal nutrition.

Improvements are being attained by the Department in the indigenous milk breeds of cattle by better feeding and selective breeding and by crossing indigenous breeds with the famous milch breeds of Ayrshire and Holstein. Sterilised milk is now being carried over distances up to 1,000 miles and should the experiments being made in this connection prove successful it will open a new vista of possibilities for the dairy industry in India. Much attention is being paid to the question of cattle feeding. For instance, extensive trials have been made with different methods of storing silage. Public interest in dairying and cattle breeding appears to be growing throughout India.

The introduction of improved tillage implements from the West has already done much to raise the standard of farming in India and work in this direction is being pressed forward. Thousands of improved implements are now to be seen in the countryside. A great difficulty in the introduction of improved drills, mowing

machines, fodder cutters, threshers, winnowing machines, cane mills and so on, suitable to the different needs of various parts of the country is the low purchasing power of the people and the Agricultural Departments in the Provinces have engaged the services of agricultural engineers and adopted other means to encourage and facilitate the desired progress by the invention of simpler and cheaper implements of the necessary kinds than those imported from overseas.

The past two or three years, however, have seen tremendous strides made in the popularising of modern implements and at the Bombay Presidency Agricultural Show held in Poona in October 1926, (the largest show ever held in Asia) the machinery section alone contained exhibits of farm machinery valued at many lakhs of rupees demonstrating that there is a fast increasing demand for modern implements.

THE ROYAL COMMISSION ON AGRICULTURE IN INDIA.

The Report of the Royal Commission on Agriculture in India which was appointed in April 1926 and which commenced its work in India in October of that year was published on June [illegible], 1928. The Members of the Commission were the Marquess of Linlithgow (*Chairman*), Sir Henry Lawrence, K.C.S.I., I.C.S., Sir Thomas Middleton, K.B.E., C.B., Sir Ganga Ram, C.I.E., M.V.O., Sir James MacKenna, C.I.E., I.C.S., Mr. H. Calvert, C.I.E., I.C.S., the Rajah of Parlakimedi, Professor N. N. Gangulee, Dr. L. K. Hyder and Mr. B. S. Kamat with Mr. J. A. Madan, I.C.S., and Mr. F. W. H. Smith of the India Office as Joint Secretaries. Mr. F. Noyce, C.S.I., C.B.E., I.C.S., was attached to the Commission in February, 1927. Sir Ganga Ram died in London in July, 1927.

The Commission were directed to examine and report on the existing conditions of agricultural and rural economy of British India and to make recommendations for the improvement of agriculture and to promote the welfare and prosperity of the rural population. In particular, they were directed to investigate and to make recommendations regarding the measures being taken for the promotion of agricultural and veterinary research, experiment, demonstration and education; for the compilation of agricultural statistics; for introduction of new or better crops and for improvement in agricultural practice, dairy farming and breeding of stock; the methods by which agricultural operations are financed and credit afforded to agriculturists; and the main factors affecting the rural prosperity and welfare of the agricultural population. The existing systems of land ownership and tenancy or of assessment of land revenue and irrigation charges, or the existing division of functions between the Government of India and local Governments were excluded from the scope of the Commission's investigations but they were at liberty to suggest means whereby the activities of the Governments in India might best be co-ordinated and to indicate directions in which the Government of India might usefully supplement the activities of the local Governments.

The Report of the Commission was issued in two volumes, the first containing the report proper and the second a series of introductions to the provincial volumes of evidence describing the main factors of provincial life with special relation to their agricultural aspect. Sixteen volumes of evidence taken by the Commission were also published.

Introduction.—The Report commences with an introduction giving a general picture of village life in India and a description of the obstacles to the development of agriculture in the past such as lack of communications and of internal security and famines. An account of the extent to which these obstacles have been overcome leads to a discussion of the present economic position. The Commission then explain that, though they have dealt at length throughout their Report with the problem of improving the efficiency of the agricultural departments and of extending their activities over the whole area of agricultural India, they have regarded this as merely one aspect of the far wider problem of creating an environment in which the cultivator would be willing to receive and to put to the best possible use the advice and help which the agricultural and other departments are in a position to place at his disposal. They declare that their object has been to suggest ways and means to assist the advance of the rural community to a fuller life.

Historical Retrospect.—In Chapter II the Commission give an account of the steps taken to promote agricultural improvement in India both by the Imperial and Provincial Governments previous to 1880 when the Report of Famine Commission led to the establishment of the Department of Revenue and Agriculture of the Government of India, and to the creation of provincial departments of agriculture. They proceed to describe the complete reorganisation of the Imperial and Provincial Agricultural Departments brought about by Lord Curzon in 1905 when the Pusa Research Institute was established, and the existing organisation and functions of those Departments. They dwell on the effect of the constitutional changes of 1919, as the result of which agriculture and all other departments closely connected with rural welfare, with the exception of irrigation, were transferred in all the major provinces to the Governor acting with a Minister.

Organisation of Agricultural Research.—In Chapter III, the Commission state that the most important problem with which they had been confronted was that of devising some method of infusing a different spirit into the whole organisation of agricultural research in India and of bringing about the realisation on the part of research workers in this country that they are working to an end which cannot be reached unless they regard themselves as partners in a common enterprise. They had found not only a lack of sufficiently close touch between the Pusa Research Institute and the provincial agricultural departments but also between the provincial departments themselves. After describing the way in which similar difficulties had been overcome in Canada, the United

States and Australia and dismissing as inadequate the constitution of crop committees on the model of the Indian Central Cotton Committee or the constitution of a quasi-independent governing body for Pusa on which the provincial agricultural departments and non-official interests would be represented, the Commission propose the establishment of an **Imperial Council of Agricultural Research.** The primary function of the Council would be to promote guide and co-ordinate agricultural, including veterinary, research in India and to link it with agricultural research in other parts of the British Empire and in foreign countries. It would make arrangements for the training of research workers, would act as a clearing house of information in regard not only to research but also to agricultural and veterinary matters generally and would take over the publication work at present carried out by the Imperial Agricultural Department. The Commission proposed that the Council should be entrusted with the administration of a non-lapsing fund of Rs. 50 lakhs to which additions should be made from time to time as financial conditions permit. Its Chairman should be an experienced administrator with a knowledge, if possible, of Indian conditions and, in addition, there should be two other whole-time members of the Council for agriculture and animal husbandry respectively. The Commission suggested that the Council should consist of thirty-six members, in addition to the Chairman and the two whole-time members. Of these, eight would be nominated by the Government of India, eighteen would represent the provincial agricultural and veterinary departments, three would represent the Indian Universities, two would represent the Indian Central Cotton Committee and the planting community respectively and five would be nominated by the Council for the approval of the Government of India. The Council would largely work through a Standing Finance Committee and sub-committees. A provincial committee should be established in each major province to work in close co-operation with it. The advisory duties of the Agricultural Adviser to the Government of India would be taken over by the Chairman and whole-time members of the Research Council, his administrative duties being taken over by a whole--time Director of the Pusa Institute. The Commission considered it essential that India should become self-contained in the matter of higher agricultural training at an early date and that the organisation of Pusa as a centre for such education should be proceeded with. They regarded it as most desirable that Indian universities should be brought into closer touch with agricultural research and held that the most important contribution which they could make in this direction was an improvement in their standard of instruction in pure science.

Except in the case of jute, the Commission held that the trade concerned should provide the funds required for any research on the product in which it is interested beyond that undertaken in the normal course by the agricultural departments. Their reason for excepting jute was the large amount derived from the export duty on raw jute and jute manufactures which give the Government of India a direct interest in the prosperity of the industry. They, therefore, suggested the establishment of a Central Jute Committee on the lines of the Indian Central Cotton Committee to deal with all problems connected with jute. The Chairman of the Agricultural Research Council would be the Chairman of this Committee which the Commission considered should be financed by an annual grant of Rs. 5 lakhs from central revenues.

The Commission suggested the retention of the Board of Agriculture, the Council of Agricultural Research being asked to advise as to any changes in its constitution which might seem calculated to promote its usefulness.

Agricultural Improvement.—In Chapter IV. the Commission dealt with such subjects as soils, manures, improved crops, distribution of seeds, agricultural implements and the prevention of pests and diseases. As regards the question whether the soils of India are to-day undergoing a progressive decline in fertility, their view was that, in an overwhelming proportion of the agricultural lands of India, a condition of stability has been reached and that no further deterioration is likely to take place in existing conditions of cultivation. They advocated much more work by the agricultural departments on soils and soil conditions and suggested the appointment of additional staff for this purpose. They did not consider that the agricultural departments are at present in a position to give the cultivator, whether of irrigated or unirrigated crops, definite advice in regard to the use of fertilisers and recommended that the existing material bearing on this point should be carefully studied and the results obtained correlated so far as the nature of the material permits. A programme of experiments with the object of ascertaining with exactitude the extent to which fertilisers can be profitably used should be formulated. The Commission were unable to suggest any alternative to the use of farmyard manure as fuel for domestic purposes where coal and wood are dear but suggested that steps should be taken to promote the better preservation of such farmyard manure as is not diverted to consumption as fuel, that the refuse of crops should be used for fuel to a far greater extent than is the case at present and that more investigation should be made into the possibilities of manufacturing synthetic farmyard manure. The use of poudrette was considered preferable to that of night soil and it was recommended that the agricultural departments should conduct experiments in the conversion of night soil into manure and arrange for demonstrations. The departments should also investigate the best methods of employing leguminous crops in increasing soil fertility and the possibility of growing crops which would supply green manure without impairing the commercial value of the crop. They should undertake experimental work to discover what green manure crops can best be included in the cultivator's rotations. The Commission were of opinion that no justification could be made out for an export tax on oil-seeds, oilcakes, bones, bone meal and fish manures or for a prohibition on their export. They held that the only method by which the

advantages of the supply of combined nitrogen available in the large crops of oil-seeds grown in India can be secured is by the natural development of the oilcrushing industry and advocated an investigation into the possibilities of an extension of the industry and also into the economics of the bone-crushing industry. They were against any further investigation under Government auspices into the possibilities of manufacturing synthetic nitrogen in India.

The Commission pointed out the great scope which still exists for further work in introducing **improved varieties of crops** in India, especially in regard to millets, pulses and oil-seeds. They held that, of the methods of obtaining varieties superior to those ordinarily grown, selection is the one which still, in general, offers the greatest possibilities in Indian conditions. Hybridisation should only be undertaken by officers who, in addition to special training have had experience of Indian crops and conditions.

Experiments in the introduction of new crops should continue but work on exotics should, in no circumstances, take precedence of work on crops already grown in India. No new varieties should be put out until they have been thoroughly tested in the conditions under which they would be grown by the cultivator and it has been thoroughly well established that they possess marked advantages over those already grown.

The Commission held that, though seed merchants of proved integrity and enterprise should be encouraged by the agricultural departments, for a very long time to come **seed distribution** must continue to form one of the most important branches of the work of the agricultural departments. Co-operative agency appeared to offer the best prospects of assistance to the departments in their work but use might also be made of private seed agents. A considerable increase in the number of seed farms was desirable. A separate organisation within the agricultural departments for seed distribution and seed testing was recommended, this organisation to be in charge of a Deputy Director working under the Director of Agriculture. Though continued research on rotation and methods of tillage were required, the Commission held that the more important problem in regard to methods of tillage was that of bringing home to the cultivator knowledge already available.

The Commission did not consider that the agricultural departments had made the fullest use of the opportunities which had presented themselves in regard to the introduction of **improved implements**. The main reasons for this were that agricultural engineering had been regarded as a secondary sphere of departmental activity and that work on implements had in several provinces, been entirely overshadowed by that connected with pumping and boring operations. The Commission, therefore, recommended a complete reorganisaion of the agricultural engineering sections of the agricultural departments which should, in all respects, be integral parts of the departments. They held that the aim of the agricultural departments should be the evolution of a small number of types of implements and machinery suitable for a wide range of conditions and suitable also for mass production. Investigation into the relation of the capacity of the draught cattle of India to the implements they are required to draw was also suggested.

As regards **pests and diseases**, the Commission did not consider any modification of the rules framed under the Destructive Insects and Pests Act was called for. They suggested legislation on the lines of the Madras Agricultural Pests and Diseases Act for other provinces and also to prevent the importation of pests and diseases from India into Burma. The strengthening of the Imperial and Provincial entomological and mycological staff in certain respects was recommended as was the grant of gun licenses on a more liberal scale in order to deal with the damage done to crops and cattle by wild animals.

Subdivision and Fragmentation of Holdings.—In Chapter V, the Commission discussed one of the greatest obstacles to agricultural improvement in India, that presented by the smallness of holdings resulting from subdivision, which is chiefly due to the laws of inheritance customary amongst Hindus and Muhammadans which enjoin a succession to immovable property amongst all the heirs usually in equal shares, and fragmentation which is due, in the main, to the way in which the division of property is effected. The Commission pointed out that subdivision had been retarded where restrictions on the alienation of land had been imposed but that no other suggestion had been put forward for the prevention of further subdivision without interfering with the laws of inheritance. The only measure that appeared to promise relief from the evils arising from the fragmentation of holdings was the process known as consolidation of holdings. Some very striking results on these lines had been achieved on a voluntary basis in the Punjab through the agency of the Co-operative Department, and, in several provinces, opinion in favour of action on similar lines had manifested itself. The Commission held that the initiative must come from the State which should undertake propaganda work, explore the actual situation and bear the cost in the early stages. They laid down the principles which should be embodied in any legislation designed to promote consolidation.

Demonstration and Propaganda. In Chapter VI, the Commission discussed the best means of bringing improved methods of agriculture to the notice of the cultivator. They suggested that the several methods of propaganda employed, their relative cost and the claim of each on the time of the staff, should be frequently reviewed in the light of recorded results and that any method proved ineffective should be abandoned. In their view, the only hope of convining the cultivating classes of the advantage of agricultural improvement lay in ocular demonstration. Demonstration on the cultivator's own fields was preferable to that on a Government demonstration farm in view of the ineradicable suspicion by the cultivator of the results obtained on the latter. There was, however, no objection to the establishment of special demonstration farms for demonstrations involving industrial as well as agricultura operations.

Experimental farms were unsuitable for demonstration work and should be confined to the purpose for which they were intended. Departmental seed farms, on the other hand, could be used with advantage for such work. Demonstration farms, established to demonstrate the possibilities of capitalistic farming, should be run at a profit and seed farms should be at least self-supporting. Short courses in particular subjects should form an important part of the work of demonstration and seed farms. The two systems of carrying out demonstrations on the cultivator's own fields, that under which a plot is hired and the cultivation is carried on throughout by the departmental staff and that under which the land is cultivated by the cultivator himself under departmental supervision, should be adopted in all provinces and the results compared.

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The various **publications issued by the agricultural departments** were held to serve a useful purpose in stimulating general interest in the work of the departments but the vernacular leaflets, which are now issued in large numbers, were of little value unless issued in connection with a definite demonstration of their subject matter, as were other forms of propaganda such as lectures, the cinema and wireless. The Commission recommended that the agricultural departments should consider the advisability of undertaking the production of films as also the possibilities of demonstration trains as organised recently in Bengal and the Punjab.

The Commission pointed out that **agricultural associations** had, for various reasons, proved a failure in most provinces and that the agricultural departments had not been successful in exploiting the possibilities offered by the co-operative movement for propaganda. They suggested that the divisional boards and taluka development associations in the Bombay Presidency constituted an organisation for the coordination of the propaganda work of the agricultural and co-operative departments which was worthy of study by other provincial governments. Far greater use should be made of cooperative societies in propaganda work.

The Commission recommended the concentration of demonstration and propaganda work both in regard to the area of operation and the subjects selected for demonstration. They recommended the appointment to the office of the Director of Agriculture of an officer whose sole duty it would be to organise and systematise propaganda work throughout a province. They held that the propaganda work of departments concerned with rural development, other than the agricultural and veterinary departments, was best carried on through associations organised for general purposes and through co-operative bodies.

An annual prize awarded by the Government of India for the most striking agricultural improvement of the year was suggested as a valuable stimulus to agricultural development.

Animal Husbandry.—Chapter VII of the Report is the most valuable contribution to the solution of the various problems connected with the improvement of cattle in India that has yet been published.

The Chapter commences with a brief reference to sheep and goat breeding. The Commission held that, in this direction, the main energies of livestock experts should be concentrated on a study of the best Indian types and the building up, by selection, of a flock of ewes or she goats with definite characteristics before any modification of characteristics by crossing is decided on.

The Commission emphasized the extent to which the prosperity of Indian agriculture is linked with the improvement of livestock, and stated that the four cardinal points in a policy of improvement must be :—

(a) attention to all matters that would tend to decrease the number of bullocks required for cultivation ;

(b) an effort to secure better treatment for dry cows and cows in-calf ;

(c) a reduction in the number of plough cattle ; and,

(d) an increase in the efficiency of plough cattle.

They held that, in nearly every part of India, the common grazing lands and all grass lands close to villages were hopelessly overstocked but that, nevertheless, where their treatment was good, many fine cattle belonging to a number of well recognised breeds were to be found. No large additions to grazing grounds are, however, possible and efforts should, therefore, be concentrated on increasing the productivity of the land already growing grass. The Commission considered that the scope for such efforts was great and suggested various ways in which the productivity of the existing grazing grounds could be increased, *e.g.*, by regulation and the establishment of rotational grazing. They recommended that the importance of cutting and storing dry grass in default of hay and of making hay, wherever conditions permitted, should be impressed on the cultivator. They considered that there were great possibilities for silage but that there were practical difficulties in persuading the cultivator to adopt it. The immediate policy should be to concentrate on efforts to get the cultivator to make silage for his cows and young stock from recognised fodders and inferior grasses which experiments have shown to be suitable for this purpose. Even, however, when all possible use has been made of existing sources of supply, a shortage of fodder is likely to arise in many parts of India. The Commission held that the cultivation of fodder on the cultivator's holding was the only remedy for this. They drew attention to the great possibilities of Egyptian cover, especially if its seed could be produced cheaply and on a commercial scale in India and suggested the encouragement of the cultivation of leguminous fodder crops by

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the remission of the charge for water from government sources of irrigation or by the grant of concession rates.

The commission held the task of the livestock breeder to be the establishment of pure and improved **types of good cattle.** They pointed out the great difficulties of this task in Indian conditions even when a single purpose is in view and the obstacles to success involved in the quest for dual purpose breeds, *i.e.,* for breeds suited for both draught and milking and *ghi* production. In their view, caution was required in improving the milking qualities of draught breeds of cattle, lest other qualities which gave special value to the breed were sacrificed. The attempt to provide dual purpose cattle should only be made in those districts in which the prospects for successful milk production were markedly better than, on the average, they now are. Even in such districts, the question whether it was expedient to develop high milk production in cows or to resort to buffaloes was one which required careful consideration. In breeding draught cattle, the general rule should be to encourage qualities only in so far as these were entirely consistent with the maintenance of the essential qualities which such cattle should possess. The Commission considered that there was room for the buffalo as well as the cow as a dairy animal, and that the aim of the breeder of buffaloes should be an increase in the productiveness of the she-buffalo and the maintenance of a sound constitution.

Various ways in which action could be taken to augment and cheapen the supply of pure milk to large cities were suggested.

The Commission recommended that, where cultivators evinced a real interest in their livestock, the organisation of co-operative breeding societies should be encouraged by the loan or gift of a good bull and by the provision of grazing ground, if available, on favourable terms. They were not in favour of the prohibition of the export of breeding bulls but considered that the export of cows and heifers was usually undesirable and should be closely watched by Government. They did not advocate the general institution of herd books on the lines of those maintained in western countries or the formation of milk recording societies of the western type.

The control of livestock improvement should generally be entrusted to the agricultural departments. Where veterinary officers showed a special aptitude for work on livestock improvement, they should be posted to livestock farms. Whole-time officers in charge of livestock improvement should be appointed in all major provinces.

The Commission recommended that the staff and equipment of the Animal Nutrition Section of the Imperial Institute of Animal Husbandry and Dairying at Bangalore should be enlarged and that a scheme for a Research Institute for the investigation of animal nutrition problems should be prepared. The establishment of a research institute for the study of animal genetics was considered unnecessary in present conditions.

The Commission recommended that the work of the **Cattle Bureau** should be taken over by the Council of Agricultural Research and that Cattle Conferences on the lines of those held in conjunction with recent meetings of the Board of Agriculture should be held at intervals of about two years. They considered it desirable that the Central Government should pay much more attention to cattle improvement and that one of the whole-time members of the proposed Imperial Council of Agricultural Research should represent the interests of animal husbandry. This representative should be an authority either on livestock breeding, animal husbandry or veterinary medicine.

Forests.—In Chapter VIII, the Commission dealt with Forests in relation to agriculture. They suggested that grass cutting should be encouraged in preference to grazing, that the grazing of inferior cattle in the forests should be discouraged and that the intensity of grazing consistent with the proper development of the forests and the preservation of desirable grasses should be determined as soon as possible. They recommended that the question of fodder supplies from forest areas should be examined by forest and agricultural officers in consultation, and that the cost and efficiency of wood and charcoal relative to that of coal should be investigated. They held the initiation of new, and the development of existing, forest industries to be matters of great importance to the agricultural population in the vicinity and pointed out the wide field which exists for experiment and development in regard to these industries. In regions of heavy rainfall, the only remedy against harmful deforestation appeared to be protection against damage by cultivators and their cattle in order to allow of natural regeneration. In tracts of light rainfall, there appeared to be no generally satisfactory remedy though, in carefully selected areas, artificial regeneration might be possible at high cost.

The Commission recommended that the forest areas in each province should be classified with a view to determining those areas which were most suitable for the growth of timber or the preservation of which under forests was desirable on climatic or physical grounds, those which were most suitable for development as fodder reserves or grazing grounds and those which should be handed over for ordinary cultivation. The Commission held that the most promising method of establishing village forests was to be found in handing over to village management certain more or less wooded areas now under the management of the Forest Department. The creation of a special agency would be required to manage minor forests, to give advice and technical assistance to forest *panchayats* and co-operative afforestation societies, and, generally, to develop to their utmost economic capacity the forest resources of the plains. The question whether this branch should be part of the Forest Department or should work under the Revenue Department was one to be decided in the light of the local conditions. The Commission considered that it would be advantageous if short courses were instituted at the agricultural colleges for all newly recruited forest officers and if forest officers were attached to the head-

quarters of the provincial agricultural department before being posted to the new minor forests division.

Diseases of Livetock and their Control.—The Commission commenced Chapter IX by pointing out the immense losses to agriculture in India caused by contagious diseases of animals of which rinderpest is the most formidable. They did not consider measures for stamping out rinderpest on the lines possible in European countries practicable in India or that the time was ripe for the establishment of protective belts on the South African model. In present conditions in India, rinderpest and other contagious diseases must be combated by measures aiming at the protection of the individual animal rather than by measures which aimed at stamping out the source of infection. In their view, the serum-simultaneous method of inoculation offered the only hopeful method of combating the ravages of rinderpest and, given proper safeguards, involved a risk so slight that, in view of the benefits conferred, it should be accepted. Its employment on a large scale was, therefore, recommended but, in view of the practical difficulties involved, general resort to compulsory inoculation was not considered desirable, though it should be enforced for all animals kept by milksellers in large cities. All inoculation against disease should be done free of charge. An All-India Contagious Diseases of Animals Act should be passed with a view to ensuring uniform procedure in dealing with contagious diseases.

The Commission recommended that, in all provinces, the aim should be to provide a veterinary hospital with accommodation for in-patients at the district headquarters and, in addition, a number of dispensaries serving subdivisions of the district. The value of dispensaries would be greatly enhanced if two or more veterinary assistants were attached to them, one or more of whom would be free for touring duties.

In the view of the Commission, the control measures for treating and preventing the spread of **contagious diseases** should be regarded as the concern of the provincial governments; the duty of providing a local veterinary service for treating diseases not scheduled as contagious and for dealing with operations and wounds should, as soon as the necessary arrangements could be made, rest with local bodies. The aim should be to provide on an average one qualified veterinary surgeon for every district in British India and one veterinary assistant surgeon for each 25,000 cattle. Each province should be divided, for veterinary purposes, into two or three circles, each of which should be in charge of a deputy director who would be a member of the Indian Veterinary Service or of the new superior veterinary services. The qualified veterinary surgeons provided for the districts would constitute the Provincial Veterinary Service, the primary duty of which would be the control of epidemic desease but which would also be entrusted with the supervision of dispensaries and of touring veterinary assistants. The subordinate veterinary services would continue as at present to be mainly employed by local boards but the immediate transfer to the boards of complete control over them was not recommended as progress in the direction of transferring greater responsibility to local bodies in veterinary matters should only be made gradually. When complete transfer had been effected, a Veterinary Reserve Corps of selected veterinary assistants should be formed.

The Commission held that, for the **training of veterinary surgeons** and veterinary assistant surgeons, two entirely distinct courses were required with different entrance requirements and different classes at all stages. The framing of a suitable curriculum for training veterinary assistant surgeons should be referred to a body of experts. The course should extend over two or three years and special prominence should be given in it to the anatomy, physiology, and diseases of cattle. The course of study for veterinary surgeons should extend over a period of five years from matriculation and should end in a degree. It should be settled by Conference between the University and veterinary authorities. The establishment of an All-India Veterinary College was not recommended nor was the expansion of the Imperial Institute of Veterinary Research at Muktesar as an educational centre. It was suggested that, at the outset, one of the existing veterinary colleges should be selected for the training of veterinary surgeons and that the training should be supplemented by a short period of work at Muktesar.

The Commission considered that the provincial veterinary college should be the natural centre of research work in the provinces, and that all senior officers employed in the colleges should be expected and encouraged to undertake investigations in their own special spheres. They held that Muktesar was well suited for the prosecution of research into animal disease and that a second Research Institute was not required. A number of suggestions for improvement in the organisation of the **Muktesar Institute** were made, the most important of which were that an officer with administrative experience should be attached to the staff to relieve the Director of administrative work and that the expenditure on research work should be separated as fully as possible from that on manufacturing operations. It was recommended that Provinces and States should share in any profits from the manufacture of sera in proportion to their purchases and that the administrative control of the Institute should pass from the Agricultural Adviser to the Government of India to the Director of the Institute. The revival of the appointment of Inspector General, Civil Veterinary Department, was held to be unnecessary but it was proposed that a small Standing Committee of the Council of Agricultural Research to deal with veterinary matters should be constituted. The Chairman of this Committee should be the whole-time member representing animal husbandry on the Research Council.

Irrigation.—In Chapter X, the Commission examined the present position of irrigation in India and its future possibilities from the agricultural point of view. After giving a brief survey of the development of irrigation in India and a description of the projects in progress or under consideration, they suggested a periodic revision of the position in regard to all outstanding irrigation projects and expressed

the hope that the relaxation since the introduction of the Reforms, of the financial rules which formally governed the construction of protective works would furnish a stimulus to the construction of this class of works. They recommended that further investigation and experiment should be undertaken before a final decision against the sale of water by volume was reached. They did not consider any change in the agency charged with the distribution of water necessary but suggested that the function of irrigation *panchayats* should be encouraged. The construction and maintenance of minor irrigation works should be entrusted to a special agency. Pumping and boring operations should be entrusted to the Agricultural Departments which should make detailed investigations into the economics of tube well irrigation and should carry out a systematic survey of subsoil water supplies. Government assistance in regard to the construction of tube wells should be limited to the provision of information, of technical advice and of loans, where required, and to placing boring equipment and skilled labour at the disposal of the landholder on payment of a moderate fee. The Commission held that the construction of ordinary wells was essentially a matter for private enterprise but that there were many ways in which the agricultural and irrigation departments could help the landholder. In districts where holdings were very small, every effort should be made to encourage the co-operative sinking and working of wells. Where the number of abandoned wells was at all numerous, a special enquiry should be made into the causes of abandonment.

The Commission considered the establishment of closer relations between the agricultural and irrigation departments advisable and suggested that short courses in agriculture for irrigation officers and in irrigation for agricultural officers should be instituted.

The establishment of a Central Bureau of Information on irrigation matters and frequent conferences of irrigation engineers were recommended. It was suggested that more attention should be paid to research on irrigation problems in all provinces in which irrigation is of importance and that there should be the fullest collaboration in such research between the agricultural and irrigation departments, the assistance of the Indian Universities in such research being enlisted. The Commission did not advocate the establishment of a Central Station for irrigation research but proposed that the work of each provincial station should be passed under review by a Committee appointed by the local government in consultation with the Central Board of Irrigation and the Council of Agricultural Research.

The special irrigation problems of Sind, Bengal, the North-West Frontier Province and Baluchistan were reviewed, the most important recommendations under this head for Sind being that that sub-province should have a Director of Agriculture of its own with headquarters at Karachi, and that a chain of research stations subsidiary to the station at Sakrand with a full staff of competent officers should be established. For Bengal, the separation of the Irrigation Department into two separate departments, one to deal with irrigation proper and the other with navigation, embankments and drainag was recommended as was also the investigation by a committee of experts of the problems presented by the river systems of that province.

The Commission suggested that the Central Bureau of Information for Irrigation should deal with matters arising out of hydro-electric development and that advice in regard to hydro-electric schemes should be obtained from firms of consulting engineers.

Communications and marketing.—In the first part of Chapter XI, the Commission discussed the present state of communications in India. They pointed out that, although the improvement of rural communications was a more important factor in rural development, the condition of the roads in India had deteriorated in recent years. One cause of this was the rapid expansion of motor traffic which had brought into existence an entirely new range of problems of road construction and maintenance. The Commission suggested that Road Boards with functions similar to those which have been entrusted to the Communication Boards in the Punjab and Burma should be constituted in all provinces. They emphasised the necessity that special attention should be paid, in any ordered programme of road development, to the subsidiary communications which are of the greatest importance from the point of view of the cultivator. Liberal financial assistance should be given by local governments to local bodies to enable them to discharge their duties to roads not included in the arterial system. The policy of grants-in-aid from provincial revenues for the construction or improvement of village roads which is being followed in certain provinces was commended but it was pointed out that the improvement of such roads, must in the main, depend upon the efforts of the villagers themselves and that co-operative action in this direction should, therefore, be encouraged in all possible ways. The Commission expressed the hope that railways and roads in India would be regarded as complementary and not as competitive and that the senseless and wasteful competition between rail and motor traffic which is to-day taking place in many European countries would be avoided. They suggested a periodical revision of railway freights with a view to the adjustment of their incidence as between various sorts of agricultural produce. The Commission did not consider that, in ordinary circumstances, any case could be made out for the introduction of tramways to develop rural transport or that roadless tractors could be of any material assistance in opening up rural areas.

The Commission were of opinion that, apart from the organization of producers for the sale of produce, the most effective means of eliminating unnecessary middlemen were the provision of good roads and the establishment of well regulated markets, easy of access to the cultivator. They, therefore, suggested the establishment in all provinces of *regulated markets* on the Berar system, as modified by legislation recently enacted in Bombay, and recommended that this system should be extended to products other than cotton. Regulated

markets should only be established under provincial legislation and local governments should take the initiative in establishing them. The Commission laid down the lines on which such markets should be organised and suggested ways in which they might be utilised for purposes of propaganda in favour of agricultural improvement and of thrift. They recommended that the Government of India should again undertake an investigation into the possibility of standardising weights and measures throughout India and added that Burma required separate treatment in this respect.

The Commission found that much Indian agricultural produce was marked in an unsatisfactory condition though matters in this respect had improved considerably in recent years. Effective pressure to secure improved quality from the producer must, in the main, be applied by the agricultural and co-operative departments though organisation amongst the ultimate buyers was, in some instances, an effective weapon and organised trade associations in India could give great assistance. The most effective method of enabling the cultivator to secure an adequate premium for superior quality was held to be organisation for the purposes of sale. Co-operative sale societies should be encouraged in all possible ways by the agricultural and co-operative departments. Help to these societies could best be given by agricultural departments in the form of assistance in the grading of produce. Auction sales by the departments were considered a useful means of securing an adequate premium for the superior quality of a new variety, especially in the earlier stages but should only be continued until they could be taken over by co-operative societies or private agencies.

Whilst the Commission suggested that the possibilities of developing an export trade in high class wheat should be borne in mind, they did not recommend the establishment of a grain elevator system in India.

Market surveys were regarded as an essential preliminary to the formulation of an effective policy for the improvement of marketing. The lines on which such surveys should be carried out were suggested as was the appointment of an expert marketing officer to the staff of the agricultural departments in all the major provinces.

The Commission also recommended the appointment of an officer with experience of agriculture and co-operation to the staff of the Indian Trade Commissioner in London and to that of the Director General of Commercial Intelligence in Calcutta. They considered that the appointment of separate Trade Commissioners in other countries than England would ultimately be desirable.

The Finance of Agriculture.—In Chapte XII, the Commission dealt with the question of providing the cultivator the capital he requires. They pointed out that the form of long-term credit which is most common throughout India is based on the mortgage of agricultural land. They suggested that no usufructuary mortgage of agricultural land should be permitted unless provision were made for automatic redemption within a fixed period of years, of which twenty should be the maximum. The question of legislation in regard to the redemption of mortgages on the lines of the Punjab Redemption of Mortgages Act was commended to the consideration of other local governments. The Commission held that the desirability of extending the principle of statutory restriction on the alienation of land could only be measured in the light of the local conditions, but that an enquiry should be made into the extent to which the hereditary cultivating class is being expropriated by those who do not themselves cultivate the land. Where existing systems of tenure or tenancy laws operate in such a way as to deter landlords from investing capital in the improvement of their lands, it was suggested that the subject should receive careful attention with a view to the enactment of such amendments as might be calculated to remove the difficulties and that action to permit the establishment by landlords of home farms was specially necessary. The working of the Land Improvement Loans Act and of the Agriculturists Loans Act was considered satisfactory but it was recommended that steps should be taken to make landholders better acquainted with the facilities offered by the former. The Commission held, however, that the greatest hope for the salvation of the rural masses from their crushing burden of debt lay in the growth and spread of a healthy and well organised co-operative movement and that local government should, therefore, give that movement all the encouragement possible. Legislative measures to deal with the problem of indebtedness had proved a failure. This failure was specially disappointing in the case of the Usurious Loans Act, the provisions of which were specially calculated to remove the worst evils of uncontrolled usury, and it was recommended that an enquiry should be made in all provinces into the reasons why this Act had not been utilized and that a special report on its working should be included in the annual reports on the administration of civil justice. The Punjab Moneylenders' Bill and the British Moneylenders' Act of 1927 were commended to the consideration of local governments as was the case for a simple Rural Insolvency Act. Experiments with conciliation bodies were suggested in certain selected areas as was a periodical review by the Income Tax Department of the position of the moneylender.

Co-operation.—Chapter XIII of the Report is devoted to the Co-operative movement in India. The Commission held that the main activities of that movement must continue to be directed to the expansion of the rural credit system. Further effort to fulfil the standards laid down by the Committee on Co-operation in India of 1914-15, which was presided over by Sir Edward Maclagan, appeared to them to be required and they suggested that an enquiry into the working of the movement on the lines followed in the Central Provinces, the United Provinces and Madras might be undertaken in other provinces with advantage. They held that the only remedy for the unsatisfactory condition of the movement in some provinces was the patient and persistent education of the members of Co-operative Societies in the principles and meaning of co-operation. They recommended that every effort should be made by the co-operative departments in all provin-

ces to build up a highly educated and well trained official staff and did not consider that the provision of such a staff should weaken the position of the honorary worker. They considered that progress in the organisation of a supervising agency by federating primary societies into supervising unions had been sufficiently satisfactory to justify further experiments in this direction. The financing and supervision of primary societies should be under separate control.

The Commissioner recommended that the best man available should be selected as Registrar of Co-operative Societies and should hold the appointment for not less than five years or more than ten. Local Governments should impress upon the officers of all departments the importance they themselves attach to a sympathetic attitude towards all phases of co-operative activity.

It was suggested that Government should give liberal assistance in the early stages to the more specialised forms of co-operative activity such as consolidation of holdings, adult education, irrigation and the like. Where expenditure by Government on audit would involve the comparative neglect of education, education should be given preference and the statutory audit should be paid for by societies.

The Commission endorsed the resolution passed by the Conference of Registrars of 1926 in favour of the establishment of *land mortgage banks* and made a number of recommendations in regard to the organisation and working of such banks and the form in which they should receive assistance from Government.

Outside the credit movement, the main function of the co-operative departments was held to be the preparation of the ground for the advice of the experts. In the propaganda work of other departments, preference both of time and attention should always be given to a co-operatively organised body of cultivators rather than to isolated individuals. Substantial progress in non-credit co-operation was not to be expected unless expert advice was liberally given. Whether this advice should be given by the technical department concerned or by the loan of technical officers to the Co-operative Department must depend on the stage of development and the particular form of co-operative activity which it was desired to foster. The desirability of appointing a special officer of the grade of deputy director of agriculture to work under the Registrar, as recommended by the Madras Committee on Co-operation, might be examined in other provinces.

The Commission did not consider an All-India Committee of Enquiry to review the progress of the movement and the defects revealed since the Committee on Co-operation sat in 1914-15 to be necessary. They suggested that official and honorary workers should be encouraged to study co-operative developments in other provinces.

The Village.—In Chapter XIV, the Commission discuss the opportunities that exist for an improvement in the general rural environment of the cultivator and in the conditions in which he lives. They pointed out that the isolation and the self-subsistent economy of village life are tending to break down and held that, in the administrative sphere, provision already exists to enable the villages to maintain and develop self-government and, at the same time, to participate in the wider life of the province.

The Commission then proceeded to emphasise the close and important interaction between agriculture and public health. The working of the Madras district health scheme showed how public interest in health matters could be developed under official guidance. The principles embodied in the Bombay village medical aid scheme were commended as were schemes for subsidising medical practitioners to settle in small towns and villages. An improved water supply was held to be so important that all measures possible to secure this should be undertaken by the local authorities.

A much wider distribution of quinine was considered necessary and it was recommended that, in order to secure this, the development of cinchona cultivation, the manufacture of quinine, and the control of distribution so far as price within India was concerned should be made a responsibility of the central Government, and that much more scientific investigation into the cultivation and manufacturing problems connected with cinchona should be undertaken.

The Commission recommended that the efforts of the medical and public health departments and of non-official agencies in their fight against disease and insanitary conditions should be supported by the central and provincial departments with all the resources, financial and otherwise, at their command. They held that research into problems of human nutrition was of such importance in Indian conditions that a Central Institute of Human Nutrition should be established, that a committee of workers on human and animal nutrition should be formed and should meet at regular intervals and that local governments should consider the desirability of undertaking research in problems of human nutrition either in provincial institutes or through individual officers.

It was pointed out that villagers have ample time at their dispoal for improving the amenities of their village by co-operative action. Specific directions in which assistance might be given them were the extension of village sites where these were congested and facilities for providing schools with adequate playing fields. For these and other purposes, the villagers were, however, much in need of leadership. Instruction of village headmen and subordinate revenue officials in the ideals of village improvement might, in some cases, be productive of good results. In other cases, a "guide" for a group of villages trained on the lines adopted in the Gurgaon district of the Punjab would seem to offer the best solution. The Commission drew special attention to the valuable lessons to be drawn from the Gurgaon uplift compaign and considered that the rural community movement throughout the Punjab combined the advantages of both the official and the private type of organisation and would prove of even greater value if it developed a women's side to its activities.

The establishment of a Bureau of Economic Research in all provinces on lines similar to those on which a Board of Economic Inquiry has been established in the Punjab was commended to the notice of the provinces and the part that Universities could play in assisting the work of rural development on both its economic and educative sides was emphasised.

The Commission held that no field of rural work gave private organisations a greater opportunity for usefulness than the raising of the members of the depressed classes in the villages to full membership of the common life and that the best means of effecting this were education and the inculcation of self-help.

It was pointed out that no lasting improvement in the standard of living of the great mass of the population could possibly be attained if every enhancement in the purchasing power of the cultivator were to be followed by a proportionate increase in the population.

Education.—In Chapter XV, the Commission discuss the type of education best adapted to the needs of an agricultural population. The Chapter commences with a view of the state of primary education in India and brings on in striking fashion its unsatisfactory character as shown by the figures of literacy and of female education. As regards the latter, the Commission pointed out the great importance to rural development of the spread of literacy among the women of India and suggested that the influence of female education in spreading lasting literacy among the young should be ascertained with a a view to demonstrating the true relation between female literacy and the spread of general literacy. For the unsatisfactory state of primary education generally, and epecially for the appalling wastage in the primary schools due to the fact that so many boys attending those schools do not stay for more than a year and that, of those who do, only half complete the course, they held the only remedy to be the introduction of the compulsory system. This should be introduced as rapidly as local conditions permitted and should be accompanied by a campaign of explanation and persuasion. Co-operative education societies on the Punjab model offered a hopeful means of securing attendance at school in present conditions. Inefficient teaching and its consequent effect on attendance should be remedied by improvements in the training of teachers and in the organisation of primary schools and a number of suggestions to this end were made. The Commission held that no attempt should be made to teach agriculture to boys in primary schools, either theoretically as nature study or practically in school gardens.

As regards the next or middle school stage, the Commission considered that there was n genuine demand for middle schools of the "Loni" type in Bombay which provides a vocational education in agriculture and that such schools were unduly expensive. They therefore recommended that no more schools of this type should be opened and that the existing schools in their present form should be closed. Vernacular middle schools on the lines of the Punjab experiment which include agriculture as an optional subject in the curriculum had, on the other hand, much to commend them and it was suggested that the policy followed in regard to the establishment of such schools in the Punjab, the United Provinces and Bombay should be adopted in other provinces. It was considered preferable to attach farms rather than gardens to such schools, provided teachers competent to manage them could be obtained.

Where high schools, are situated in rural areas, the Commission considered that the addition to the curriculum of a course in agriculture on the lines of that given in vernacular middle schools of the Punjab type should be productive of good results.

The Commission considered the *affiliation of agricultural colleges to universities* desirable. They did not recommend separate courses at the colleges for those whose aim was employment under Government and for those who proposed to farm their own land or that of others. They suggested that the intermediate examination in science of the provincial universities or an equivalent examination should be made an essential qualification for admission to all agricultural colleges and that the length of the full college course should be three years. Greater prominence should be given in the college course to agricultural economics and to instruction in farm management, and the short courses given at certain colleges should also be revised in order to permit of greater attention being devoted to these subjects. The Commission considered the miscellaneous short courses given at the colleges a most valuable form of educational activity. It was suggested that facilities should be provided to enable passed students of the colleges to obtain practical experience before commencing active work either in the public service or on their own lands. The qualifications required for the principalship of a college were laid down and it was suggested that the field of selection for the college staff might be widened by the direct appointment of distinguished graduates in science of the Indian universities. The combination, within reasonable limits, of research with teaching work at these colleges was considered of great benefit to both. Agricultural colleges were recommended for Bengal and Bihar and Orissa.

Rural Industries and Labour.—In Chapter XVI, the Commission deal with the question of industries in relation to agriculture. They pointed out, that industries located in rural areas were at present unimportant from the point of view of their demand on labour and that the multiplication of industries of the ordinary commercial type, such as cotton ginneries, rice mills and sugar refineries, would supply one solution of the problem of spare-time employment in rural areas. Of the suggestions made for the establishment of new industries, that of an increase in the number of implement firms throughout the country appeared to offer, on the whole, considerable promise. The Commission considered that there were opportunities for the development of a poultry industry which Government could further, principally by a carefully planned programme of experiments and a careful recording of the results. It was suggested that the Government should try to bring together the

various interests concerned in the production and sale of lac, with a view to forming a Committee on the lines of the Indian Central Cotton Committee and that, to this end, the existing Indian Lac Association should be reconstituted and strengthened. Whilst the stimulus of new ideas, adequate instruction and the best advice obtainable on the commercial side were the chief needs of village industries, it had to be recognised that the opportunities for improving the condition of the general mass of cultivators by the establishment of rural industries were strictly limited. The Commission held that, as a general principle, it might be laid down that the chief solution of the problems of the cultivator lay in the intensification or diversification of his agriculture. There were indications that, with the spread of industrialism, the tendency would be to multiply the number of small factories. This tendency would be to the cultivator's advantage and the co-operative movement could play an important part in linking him and his produce with the localised factories. Technical education and co-operative organisation were the only means by which the smaller industries could hold their own in the intensive competition of modern times.

The Commission considered that Government could do much to assist the mutual adjustment between the larger industries and agriculture by its policy in respect to communications and the development of power; by technical education; and by the collection of marketing information. In the case of the smaller industries, Government would have to be prepared, for a long time to come, to advise and make suggestions for development and even to be responsible for them in the pioneer stage.

The Commission held that the labour problem of to-day was the same from the agricultural point of view as it was when the Famine Commission reported in 1880, namely, to lessen the pressure of population on the land. They suggested that all restrictions on the free movement of labour in India, *e.g.*, to the tea gardens in Assam, should be reduced to the minimum and abolished as soon as possible. To encourage migration, health conditions should be improved in certain areas and definite schemes of colonisation introduced. Apart from Ceylon and British Malaya, British Guiana alone of the tropical or subtropical part of the British Empire, offered scope for emigration on any considerable scale and the Commission regarded the scheme now under consideration for promoting emigration to that colony as worthy of further exhaustive investigation.

Horticulture and Plantations.—Chapter XVII is mainly devoted to a consideration of the possibilities of extending the cultivation of fruit and vegetables in India. The Commission pointed out that, in Indian conditions, fruit growing can seldom be profitably combined with ordinary cultivation by the small cultivator and that he is faced with serious financial and other difficulties in turning from ordinary tillage to the cultivation of orchard and garden crops. They enumerated the difficulties in regard to the transport and marketing of fruit and vegetables and suggested that investigations into transport and marketing should form an essential part of any policy of active encouragement of either fruit or vegetable production. Where fruit and vegetables were grown on a large scale, the question of establishing regulated markets and of improving marketing conditions generally, including transport and the provision of cold storage, should be examined. Whilst the economic possibilities were being worked out, the agricultural departments should undertake experimental work and should encourage and strengthen private enterprise in establishing nurseries for orchard stock and the production of vegetable seeds.

The Commission considered that the importance to the community of the "planters" crops was not generally realised and suggested that the value of the scientific work done by the Indian Tea Association and the United Planters' Association of Southern India should be recognised, and co-operation between these associations and the agricultural departments secured, by arrangements for their joint representation on the Council of Agricultural Research.

Statistics.—In Chapter XVIII, the Commission made a number of suggestions for the improvement of the statistics relating to agriculture, trade and rural welfare generally issued by the Government of India and Provincial Governments and also for increasing the accuracy of the crop forecasts issued by the Commercial Intelligence Department. They recommended that each agricultural department should be strengthened by the appointment of a statistical assistant and that the appointment of this officer should precede any changes in present arrangements for statistical work. They pointed out that the application of mathematics to agriculture had introduced an entirely new factor into scientific agriculture and recommended the appointment of a statistician with the highest qualifications in this branch of science to the Imperial Agricultural Research Institute. They considered it desirable that a statistical officer should be appointed at the headquarters of each provincial government who would control all government statistical work other than that connected with agricultural statistics and, as director of a bureau of statistical information, would be an adviser to non-official workers. They recommended that the statistical organisation of the Government of India should be strengthened by the appointment of a statistician of first rate ability as head of a separate **Department of Staitstios** and expressed the hope that, as the result of this appointment, a Bureau of Statistical Information would be created with the administration of which leading economists, scientists and business men would be closely associated. They held that every opportunity should be taken to utilise the statistical experience of the International Institute of Agriculture at Rome but that the expense of a whole-time representative of India on the Permanent Committee of the Institute would not be justified by statistical considerations. They suggested that more use should be made of non-official agencies in the collection of agricultural statistics bu t did not consider that, in the present stage o development, extensive use could be made o a system of paid reporters.

The Agricultural Services.—In Chapter XIX, the Commission made detailed recommendations in regard to the recruitment, organisation, pay and conditions of service of the personnel of the Imperial and Provincial Agricultural Departments with special reference to the increased responsibilities which would be imposed on them by the recommendations made in the report and also to the changed conditions resulting from the introduction of the Reforms. They dwelt upon the necessity for a period of post-graduate training as an essential qualification for all candidates from the agricultural colleges for direct recruitment to the higher posts in the agricultural departments, and suggested that this training should ordinarily be given at Pusa. They held that restriction of recruitment for the new superior provincial services which are to take the place of the Indian Agricultural Service to a province or even to India would tell seriously on efficiency. From the point of view of wider outlook and variety of experience, officers from abroad could make a valuable contribution to the development of Indian agriculture and they, therefore, strongly endorsed the hope expressed by the Royal Commission on the Superior Civil Services in India in regard to the continued co-operation of European officers.

Miscellaneous.—In Chapter XX, the Commission discuss a few miscellaneous questions which did not appear to fall naturally within the scope of previous chapters of the Report. Recommendations were made in regard to the agricultural organisation required for the minor provinces of Ajmer-Merwara, the Andaman Islands, Baluchistan, Coorg and Delhi and it was suggested that the Council of Agricultural Research should take a special interest in the development of these provinces. It was pointed out that the foundations of an active policy of co-operation in agricultural and co-operative matters between the governments in British India and Indian States had been laid through representation on the Indian Central Cotton Committee and the Board of Agriculture and the hope was expressed that the manner in which co-operation could be rendered more effective would receive early consideration from the Government of India and the rulers of Indian States. It was suggested that an examination should be made of the action which should be taken to promote the investigation of the problems of agricultural meteorology and to decide which departments should be responsible for the different branches of the work. The continued adherence of India to the International Institute of Agriculture at Rome was regarded as most desirable and was recommended that wider publicity should be given in India to the facilities offered by the Imperia Institute and that the question of reorganising the Indian gallery at the Imperial Institute and of renewing the subscription for its maintenance should be considered.

Conclusion.—In Chapter XXI, the Commission conclude their Report by explaining that their aim had been to bring about greater efficiency throughout the whole field of agricultural production and to render the business of farming more profitable to the cultivator. They state their conviction that the success of all measures designed for the advancement of agriculture in India must depend upon the creation of conditions favourable to progress and emphasise the necessity that the rural problem should be attacked as a whole and at all points simultaneously. They conclude by pointing out the very special measure of responsibility resting on the Viceroy, the Provincial Governors and the Ministers in charge of the transferred departments in bringing about the organised and sustained effort by all the departments whose activities touch the lives and surroundings of the rural population, which is required if the problem of rural uplift is to be adequately dealt with.

Action by the Government of India.—The Government of India convened a Conference of Provincial Ministers of Agriculture and Departmental representatives at Simla from October 1st to the 6th to discuss the recommendations of the Royal Commission. It was announced at the conclusion of the Conference that there had been complete unanimity as to the desirability of accepting the Commission's report as a basis for rural reconstruction and agricultural advance, and for the progressive application of the main recommendations as the circumstance of each province might permit. As regards the Commission's proposals for reorganising the services engaged in the agricultural and veterinary fields, the general view was that the discretion of the Provinces should be left unfettered, in respect both of recruitment and of regulation of the terms of service. The Conference approved the principle of promoting and guiding agricultural (including veterinary) research throughout India on a footing of voluntary co-operation between the Government of India and local governments through an agency representative of All-India as well as provincial interests which would be set up and financed by the Government of India. The Government of India have announced their intention to proceed forthwith with the establishment of the Council of Agricultura Research

AREA, CULTIVATED and UNCULTIVATED, in 1925-26 IN EACH PROVINCE.

Provinces.	Area according to Survey.	*Deduct* Indian States.	Net Area.	
			According to Survey.	According to Village Papers.
	Acres.	Acres.	Acres.	Acres.
Madras	91,705,413	....	91,705,413	90,605,116
Bombay	97,361,244	18,561,280	78,799,964	78,799,964
Bengal..	52,601,158	3,477,760	49,123,398	49,123,398
United Provinces. ..	72,648,741	4,348,232	68,300,509	68,013,615
Punjab	65,546,586	3,286,700	62,259,886	60,255,184
Burma..	155,652,667	....	155,652,667	155,652,667
Bihar and Orissa ..	71,415,378	18,334,720	53,080,658	53,080,658
Central Provinces and Berar.	83,913,945	19,960,727	63,953,218	64,094,295
Assam	41,229,430	8,061,440	33,167,990	(a) 33,167,990
North-West Frontier Province.	8,524,252	140,800	8,383,452	8,514,486
Ajmer-Merwara and Manpur Pargana.	1,802,267	....	1,802,267	1,802,267
Coorg	1,012,260	....	1,012,260	1,012,260
Delhi	368,349	....	368,349	368,349
TOTAL ..	743,781,690	76,171,659	667,610,031	664,490,249

Provinces.	Cultivated.		Uncultivated.		Forests.
	Net Area actually Sown.	Current Fallows.	Culturable Waste other than Fallow.	Not available for Cultivation.	
	Acres.	Acres.	Acres.	Acres.	Acres.
Madras..	33,833,765	10,143,823	12,351,551	21,117,158	13,158,789
Bombay	31,285,312	11,606,710	6,959,898	19,701,205	9,246,839
Bengal..	23,841,200	4,656,769	5,824,662	10,217,179	4,583,588
United Provinces ..	34,800,050	3,388,563	10,497,481	10,063,305	9,264,216
Punjab	26,015,013	4,159,987	15,359,265	12,549,207	2,171,712
Burma	17,273,801	3,764,080	60,123,352	54,530,268	19,961,166
Bihar and Orissa ..	25,146,300	5,553,327	7,060,772	7,762,335	7,557,924
Central Provinces and Berar.	24,870,181	3,266,520	14,724,474	4,816,316	16,416,804
Assam	5,828,473	1,884,958	15,864,153	5,510,500	3,747,246
North-West Frontie Province.	2,304,531	471,801	2,723,582	2,655,447	359,125
Ajmer-Merwara and Manpur Pargana.	299,939	212,622	311,301	865,994	112,411
Coorg	136,982	172,358	11,690	334,045	357,185
Delhi	210,187	24,330	62,374	71,458	....
TOTAL ..	225,845,734	49,305,848	151,874,555	150,194,447	86,937,005

(*a*) Includes an area of 332,660 acres of the Balipara Frontier tract for which details are not available.

AREA UNDER IRRIGATION IN 1926-27 IN EACH PROVINCE.

Provinces.	Total Area Sown.	AREA IRRIGATED.					
		By Canals.		By Tanks.	By Wells.	Other Sources	
		Government.	Private.				
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
Madras	37,367,132	3,658,336	269,500	3,072,615	1,569,876	437,165	
Bombay	32,864,825	3,253,499	63,410	139,765	540,859	138,646	
Bengal..	* 27,469,200	101,252	230,789	425,259	87,660	473,423	
United Provinces ..	42,295,922	2,434,051	28,131	70,251	5,378,818	2,405,262	
Punjab	30,406,941	9,585,768	462,978	17,127	3,484,130	129,340	
Burma	18,289,497	639,610	286,727	208,504	15,322	316,458	
Bihar and Orissa ..	30,301,400	942,470	887,954	1,592,924	620,197	1,257,891	
Central Provinces & Berar	27,084,901	(a) ..	839,236	(a) ..	124,945	39,851	
Assam	6,616,777	120	194,145	710	..	256,596	
North-West Frontier Province	2,426,093	358,052	404,112	..	82,817	90,491	
Ajmer-Merwara and Manpur Pargana ..	442,381	..	..	35,462	82,140	.	
Coorg	138,523	2,088	..	1,405	..	..	
Delhi	249,697	25,585	..	1,243	19,698	..	
Total ..	255,953,289	21,000,831	3,666,982	5,565,265	12,006,462	5,545,093	

* Includes 343,159 acres for which details are not available.

(*a*) Included under " Private canals."

Provinces.	Area Irrigated.	Crops Irrigated. *				
	Total Area Irrigated.	Rice.	Wheat.	Barley.	Jowar or cholum (great millet).	Bajra or cumbu (spiked millet.)
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Madras	9,007,492	7,431,683	3,777	9	492,981	321,801
Bombay	4,136,179	1,227,860	428,454	18,534	727,635	614,372
Bengal	1,318,383	1,117,746	13,698	2,499	..	..
United Provinces ..	10,316,513	400,993	3,746,509	2,094,355	37,827	3,119
Punjab . ..	13,679,343	644,658	5,045,896	261,682	180,709	265,659
Burma	1,466,621	1,412,051	2,531	..	407	..
Bihar and Orissa ..	5,301,436	3,586,370	265,851	102,499	3,450	605
Central Provinces and Berar	1,004,032	845,879	50,073	1,599	122	1
Assam	451,571	441,344	..	..	..	..
North-West Frontier Province	935,442	41,481	334,070	71,898	14,320	5,775
Ajmer-Merwara and Manpur Pargana ..	117,602	137	16,894	32,878	1,827	1,948
Coorg	3,493	3,493	..	..	..	..
Delhi	46,526	18	19,214	4,450	515	96
TOTAL ..	47,784,633	17,183,713	9,996,967	2,590,403	1,459,823	1,213,376

Provinces.	Crops Irrigated.*						
	Maize.	Other cereals and pulses.	Sugar-cane.	Other Food crops.	Cotton.	Other Non-food crops.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Madras	4,420	1,215,380	110,736	280,426	181,590	496,670	10,569,473
Bombay	27,276	276,095	68,505	211,116	354,014	404,597	4,358,488
Bengal..	2,540	88,904	33,385	115,333	2,538	46,680	1,423,323
United Provinces ..	79,925	2,363,443	1,156,040	286,699	298,750	348,085	10,851,645 (a)
Punjab .. .	377,735	1,141,889	361,744	227,950	2,270,617	3,162,917	13,941,456
Burma .. .	111	3,364	2,011	65,917	146	17,789	1,504,327
Bihar and Orissa ..	82,603	873,578	184,922	146,677	3,061	128,037	5,377,653
Central Provinces and Berar	104	3,897	21,672	72,261	250	8,174	1,004,032
Assam	..	1,845	..	7,174	..	1,208	451,571
North-West Frontier Province .. .	233,630	28,522	52,662	23,646	22,099	108,617	936,720
Ajmer-Merwara and Manpur Pargana ..	11,520	22,358	202	7,906	21,714	9,482	126,866
Coorg	..	..	..	..	..	..	3,493
Delhi	148	2,438	5,797	6,120	1,784	5,946	46,526
Total ..	820,012	6,021,713	1,997,676	1,451,225	3,156,563	4,738,202	50,595,573

* Includes the area irrigated at both harvests.
(a) Includes 35,900 acres for which details are not available.

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1926-27 IN EACH PROVINCE.

Provinces.	Food Grains.				
	Rice.	Wheat.	Barley.	Jowar or Cholum (Great Millet).	Bajra or Cumbu (Spiked Millet).
	Acres.	Acres.	Acres.	Acres.	Acres.
Madras	10,841,686	18,543	3,133	4,692,475	3,079,684
Bombay	3,006,468	1,801,682	35,439	8,035,809	5,736,252
Bengal	19,713,900	129,300	74,900	4,500	2,400
United Provinces	7,470,861	6,778,010	3,980,819	2,301,008	1,909,452
Punjab	883,984	9,379,462	767,452	982,746	2,691,829
Burma	12,476,620	82,628	....	689,878	....
Bihar and Orissa	14,016,200	1,186,400	1,283,700	94,000	67,000
Central Provinces and Berar ..	5,280,201	3,734,202	13,422	4,158,823	110,088
Assam	4,685,228	....	....	....	....
North-West Frontier Province ..	41,514	998,496	*157,152	53,251	120,926
Ajmer-Merwara and Manpur Pargana.	670	23,404	52,887	72,712	36,997
Coorg	83,957	....	....	....	....
Delhi	100	49,018	18,318	35,552	46,460
TOTAL	78,501,389	24,181,145	6,387,222	21,120,754	13,801,088

Provinces	Food Grains.				
	Ragi or Marua (Millet)	Maize.	Gram (pulse).	Other Food Grains and Pulses.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.
Madras	2,272,733	111,419	60,180	6,671,151	27,751,004
Bombay	612,870	205,375	676,387	3,139,316	23,249,598
Bengal	8,900	77,300	125,900	938,700	21,075,800
United Provinces	167,108	1,682,138	6,011,938	6,155,463	36,456,797
Punjab	18,323	975,310	4,684,540	1,299,374	21,683,020
Burma	....	216,048	244,558	401,907	14,111,639
Bihar and Orissa	758,000	1,647,600	1,421,600	5,324,300	25,798,800
Central Provinces and Berar ..	12,524	141,266	1,139,628	4,874,550	19,464,904
Assam	....	....	*	193,240	4,878,468
North-West Frontier Province ..	....	437,090	206,581	93,332	2,108,342
Ajmer-Merwara and Manpur Pargana.	384	59,556	40,541	55,345	342,496
Coorg	3,310	....	43	1,065	88,375
Delhi	....	1,739	52,221	6,379	209,787
TOTAL	3,854,152	5,554,841	14,664,317	29,154,122	197,219,030

* Included under "other food grains and pulses."

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1926-27 IN EACH PROVINCE.

Provinces.	Oil-Seeds.							
	Linseed.	Sesamum (til or jinjili).	Rape and Mustard.	Ground-nut.	Cocoa-nut.	Castor.	Other Oil-Seeds.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Madras	7,326	681,890	11,789	2,680,156	552,815	385,023	149,112	4,468,111
Bombay	106,395	227,471	195,997	602,408	31,297	76,487	314,966	1,555,021
Bengal	135,800	160,400	757,000	600	11,500	100	31,500	1,096,900
United Provinces ..	353,456	186,486	150,761	12,984	..	9,749	16,204	769,640
Punjab	25,586	88,788	913,496	..	..	20	7,117	1,035,007
Burma	33	1,112,917	4,541	523,118	10,160	3	7,501	1,658,273
Bihar and Orissa ..	644,300	212,200	736,100	200	28,500	44,400	300,700	1,966,000
Central Provinces and Berar ..	100,927	457,713	51,450	44,020	..	54,700	320,604	1,929,414
Assam	11,324	21,418	365,361	..	..	5,659	..	403,762
North-West Frontier Province.	14	3,042	89,561	..	..	..	74	92,691
Ajmer-Merwara and Manpur Pargana.	129	19,239	728	..	..	..	245	20,341
Coorg	..	43	6	..	..	..	1	50
Delhi	1	25	3,283	..	..	..	130	3,439
TOTAL ..	2,325,291	3,171,632	3,280,073	3,863,486	634,272	575,741	1,148,154	14,998,649

Provinces	Condi-ments & Spices.	Sugar-cane.	Sugar Others. *	Fibres.			
				Cotton.	Jute.	Other fibres.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres	Acres.
Madras .. .	672,617	114,495	83,705	2,203,688	..	184,835	2,388,523
Bombay	181,251	68,509	2,844	4,589,288	..	99,798	4,689,086
Bengal	150,500	200,800	51,000	59,300	3,124,400	72,800	3,256,500
United Provinces ..	93,488	1,613,139	..	795,859	3,432	250,391	1,049,682
Punjab	33,713	447,960	..	2,523,718	..	50,362	2,574,080
Burma	92,823	24,007	21,532	446,801	..	2,853	449,654
Bihar and Orissa ..	56,400	289,100	200	80,900	295,600	28,800	405,300
Central Provinces and Berar	88,537	23,277	..	4,861,002	..	113,298	4,977,300
Assam	..	40,037	..	45,977	180,058	..	232,035
North-West Frontier Province.	912	52,780	..	29,505	..	756	30,261
Ajmer-Merwara and Manpur Pargana ..	3,855	425	..	44,191	..	107	44,298
Coorg	3,453	53	..	1	..	460	461
Delhi	1,219	6,706	..	3,799	..	597	4,396
TOTAL ..	1,378,768	2,881,388	159,281	15,687,029	3,609,490	805,057	20,101,576

* Area under sugar-yielding plants other than sugarcane.

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1926-27 IN EACH PROVINCE.

Provinces.	Dyes and Tanning materials.		Drugs and Narcotics.					Fodder Crops.
	Indigo.	Others.	Opium.	Tea.	Coffee.	Tobacco.	Other Drugs and Narcotics.*c*	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Madras	53,630	4,602	..	54,814	51,310	232,155	137,769	454,641
Bombay	1,152	464,201	..	35	13	109,018	28,918	2,200,752
Bengal ..	..	..	..	188,700	..	295,200	4,200	93,000
United Provinces ..	12,112	527	58,245	6,574	..	75,244	2,153	1,222,244
Punjab	23,323	8,889	970	9,740	..	62,422	693	4,154,017
Burma	399	1	..	55,130	39	105,363	63,955	211,858
Bihar and Orissa ..	13,100	500	..	2,100	..	137,800	..	32,800
Central Provinces and Berar ..	1	71	..	..	..	17,083	4,055	463,386
Assam	..	..	..	420,664	..	10,025	..	..
North-West Frontier Province ..	24	..	..	..	..	9,916	3	86,778
Ajmer-Merwara and Manpur Pargana..	4	..	..	..	..	196	..	4,029
Coorg	..	..	..	402	39,822	9	282	..
Delhi	1	..	..	..	..	979	..	16,349
TOTAL ..	103,755	478,791	59,215	738,159	91,184	1,055,410	242,028	8,939,854

Provinces.	Fruits and Vegetables, including Root Crops.	Miscellaneous Crops.		Total Area Sown.	*Deduct* Area Sown more than once.	Net Area Sown.
		Food.	Non-Food.			
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Madras	682,356	49,626	167,765	37,367,132	4,104 092	33,263,040
Bombay	266,878	6,398	41,151	32,864,825	1,040,907	31,823,918
Bengal	698,000	265,200	93,400	27,469,200	4,081,600	23,387,600
United Provinces	500,834	85,515	6,569	*b*42,295,922	7,408,704	34,887,218
Punjab	256,629	112,670	3,808	30,406,941	3,670,676	26,736,265
Burma	1,267,004	26,200	201,620	18,289,497	732,420	17,557,077
Bihar and Orissa	645,400	637,500	316,400	30,301,400	5,502,500	24,798,900
Central Provinces & Berar.	113,288	2,426	1,079	27,084,901	2,337,520	24,747,381
Assam	472,050	(*a*)	159,736	6,616,777	602,460	6,014,317
North-West Frontier Province	14,192	24,618	5,576	2,426,093	334,128	2,091,965
Ajmer-Merwara and Manpur Pargana ..	3,453	16,486	6,798	442,381	92,528	349,853
Coorg	5,616	..	..	138,523	825	137,698
Delhi	5,910	301	610	249,697	32,722	216,975
TOTAL ..	4,931,590	1,226,940	1,004,512	255,953,289	29,941,082	226,012,207

(*a*) Included under non-food crops.
(*b*) Includes 343,159 acres for which details are not available.
(*c*) Includes Cinchona and Indian hemp also.

PRINCIPAL RESULTS OF OPERATIONS IN IRRIGATION WORKS, 1926-27.

Provinces.	Mileage in Operation.		Area Irrigated.	Total Capital Outlay.	Gross Receipt.	Working Expenses.	Net Revenue.		Interest on Mean Capital Outlay.	Percentage of Working Expenses to Receipts.
	Main Canals.	Distributaries.					Amount.	Percentage on Total Outlay.		
	Miles.	Miles.	Acres.	Rs.	Rs.	Rs.	Rs.		Rs.	
Productive Works.										
Madras	4,082	8,382	2,245,140	8,32,59,678	1,36,17,666	47,55,901	88,61,765	10·64	27,19,907	34·92
Bombay	4,834	147	2,269,302	7,66,16,726	58,77,011	28,68,572	30,08,439	3.92	16,50,637	48·31
United Provinces	1,424	8,660	2,730,088	16,68,20,282	1,56,32,582	53,63,451	1,02,69,131	6.15	63,08,835	34·31
Punjab	3,075	12,963	10,466,574	29,15,48,419	5,83,42,189	1,73,16,353	4,10,25,836	14·06	1,09,00,337	29·68
Burma	427	935	578,821	2,55,04,987	23,07,064	13,13,280	9,93,784	3·90	9,05,571	56·92
Central Provinces	27	222	64,923	50,50,079	2,03,814	1,23,804	80,010	1·58	1,92,819	60·40
N. W. F. Province ..	87	200	189,928	55,05,695	11,91,349	3,76,175	8,15,174	14.80	1,79,490	31·57
Total ..	13,956	31,509	18,544,776	65,46,79,351	9,71,71,675	3,21,17,536	6,50,54,139	9·94	2,28,69,558	33·05
Unproductive Works.										
Madras	716	663	163,811	3,98,52,073	7,91,548	4,20,844	3,70,704	0·93	13,21,772	53·17
Bombay	2,910	1,937	1,082,407	12,30,80,787	50,25,601	32,44,138	17,81,463	1·45	47,57,083	64·55
Bengal	69	254	74,032	84,94,053	2,69,263	2,43,458	25,805	0·30	2,76,337	90·42
United Provinces	428	1,363	251,947	3,00,86,721	6,56,744	10,32,204	—3,75,460	..	10,62,597	165·29
Punjab	578	419	327,919	39,33,326	8,64,618	8,11,500	53,118	1·35	1,34,181	93·85
Burma	74	163	136,973	93,33,954	6,84,903	3,96,417	2,88,486	3·05	3,16,615	57·88
Behar and Orissa	764	2,751	943,506	6,27,60,271	38,43,347	16,60,921	21,82,426	3·47	20,43,193	43·21
Central Provinces	262	2,201	284,748	5,19,22, 35	9,27,642	10,68,886	—1,41,244	..	21,93,654	115·22
N. W. F. Province ..	146	368	158,009	2,31,51,136	9,19,347	7,18,096	2,01,251	0·87	7,01,103	78·11
Rajputana	..	..	..	35,47,933	83,032	76,663	6,369	0·18	1,14,946	92·34
Baluchistan	8	71	20,435	31,93,235	34,560	43,795	—9,235	..	1,14,668	126·70
Total ..	5,955	10,190	3,443,787	35,93,56,424	1,41,00,605	97,16,922	43,83,683	1·22	1,31,28,149	68·91
Embankment and Drainage Works.										
1925-26	21,275	41,221	22,180,330	99,83,78,926	11,45,73,277	4,05,57,928	7,40,15,349	7·41	3,56,41,396	35·39
1924-25	21,156	41,049	21,325,009	93,58,45,079	10,84,91,247	4,02,93,202	6,81,98,045	7·29	3,34,58,636	37·14
1923-24	20,968	40,958	20,939,678	89,33,66,370	10,65,10,765	3,77,48,040	6,87,62,725	7·69	3,08,51,437	35·44

AGRICULTURAL PRODUCE.

The following table shows the area under the principal crops, in British India, and their territorial distribution, for 1925-26. The town area is always greater than the area of cultivated land, owing to double cropping. The figures represent acres :—

Province.	Rice.	Wheat.	Barley.	Other Food Grains and Pulses.	Total Food Grains and Pulses.	Oilseeds.	Sugar.	Cotton.	Jute.	Total Area sown.	Net sown Area after deducting Area sown more than once.
Madras	11,322,646	24,122	3,573	17,086,598	28,36,939	4,494,658	194,356	2,887,410	..	38,788,496	4,954,731
Bombay	3,109,540	1,500,789	27,503	16,857,500	21,495,332	1,437,731	71,827	5,474,030	..	32,086,540	801,228
Bengal	21,133,400	130,500	83,400	1,163,900	22,514,200	1,053,000	271,800	59,600	2,523,700	28,303,800	4,462,600
United Provinces ..	7,450,300	6,947,412	4,110,971	18,242,362	36,751,047	834,857	1,418,964	990,099	..	*42,646,524	7,846,474
Punjab	968,026	9,481,990	804,342	9,575,535	20,829,893	912,832	389,927	2,701,836	..	39,709,855	3,694,842
Burma	12,236,919	69,202	..	1,427,940	13,734,061	1,074,547	44,863	464,168	..	17,943,559	669,758
Bihar and Orissa ..	14,113,400	1,161,700	1,322,300	9,468,800	26,066,200	2,035,800	290,400	84,000	263,200	30,609,200	5,462,900
Central Provinces and Berar.	5,197,868	3,524,207	16,642	9,978,469	18,717,186	2,155,393	22,942	5,385,097	..	27,116,461	2,246,280
Assam	4,530,440	..	..	177,159	4,707,599	394,920	40,636	47,303	136,508	6,393,789	565,316
N. W. Frontier Province.	25,836	1,081,228	181,718	998,213	2,286,995	124,673	48,124	32,416	..	2,660,277	355,746
Minor Areas	82,181	57,907	56,623	329,168	526,870	37,597	8,167	5,936	..	728,874	81,766
Total ..	80,171,558	23,979,057	6,610,072	85,305,644	196,066,331	15,156,008	2,802,006	18,186,166	2,923,408	256,987,375	31,141,641

* Includes 343,245 acres for which details are not available.

AGRICULTURAL STATISTICS.

—	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Net Area by professional survey	625,149,442	621,226,065	666,700,557	667,097,157	667,719,983	667,664,018	667,610,031
Area under forest	88,323,320	88,245,141	85,413,111	85,591,925	85,979,312	86,514,012	86,937,005
Not available for cultivation	145,769,969	141,504,618	153,178,439	152,015,021	151,841,176	150,971,049	150,194,447
Cultivable waste other than fallow	113,414,708	114,848,090	151,173,040	154,429,158	154,602,297	152,893,343	151,874,555
Fallow land	52,134,792	61,346,523	50,553,524	47,070,238	49,619,703	47,178,964	49,305,848
Net area sown with crops	222,825,487	212,259,506	223,183,648	224,945,489	222,490,718	226,980,248	225,845,734
Area irrigated	48,963,033	48,956,811	47,789,679	47,874,704	44,924,626	45,298,891	47,565,781
Area under Food-grains—							
Rice	78,706,103	78,120,270	79,699,870	80,576,926	77,200,711	79,306,299	80,171,558
Wheat	23,529,800	20,367,787	22,403,559	24,407,679	24,294,647	24,248,067	23,979,057
Barley	7,518,736	6,268,171	7,356,429	7,401,220	7,181,144	6,969,792	6,610,072
Jowar	22,488,249	22,690,318	24,214,263	22,834,938	21,138,172	22,470,373	20,616,751
Bajra	14,582,455	12,002,023	15,900,829	13,923,669	13,674,670	11,965,420	12,269,381
Ragi	4,222,366	4,238,957	4,211,067	4,262,040	4,220,442	3,980,093	3,881,397
Maize	6,656,116	6,205,920	6,334,705	5,954,653	5,841,693	5,347,964	5,504,367
Gram	12,940,459	9,463,432	15,054,855	16,776,936	14,437,912	16,551,817	14,325,194
Other grains and pulse	29,022,910	27,533,165	29,615,231	28,889,277	29,010,771	28,775,209	28,708,554
Total Food-grains ..	199,667,194	186,890,043	204,790,808	205,027,338	197,000,162	200,215,034	196,066,831
Area under other food-crops (including fruits, vegetables, spices, &c.).	8,484,656	7,610,459	8,194,791	8,220,423	7,954,130	7,783,934	7,757,486
Area under—							
Sugar	2,813,428	2,705,773	2,522,176	2,855,491	3,044,711	2,654,670	2,802,006
Coffee	95,815	95,501	96,611	97,006	95,995	94,298	95,166
Tea	701,443	660,751	713,379	710,244	713,161	715,836	728,857

AGRICULTURAL STATISTICS OF BRITISH INDIA.

—	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1925-26.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Area under Oilseeds—							
Linseed	2,245,305	1,496,139	2,053,858	2,372,649	2,645,120	2,559,473	2,524,078
Sesamum (til)	3,490,864	3,591,919	3,707,067	3,155,442	3,235,249	3,525,417	3,409,128
Rape and Mustard	3,679,789	2,979,484	4,232,822	3,809,186	3,652,040	3,920,035	3,088,948
Other Oilseeds	3,155,346	4,302,850	4,202,824	4,576,280	4,722,107	5,008,894	6,133,854
Total Oilseeds	12,571,304	12,370,392	14,196,571	13,913,557	14,254,516	15,013,819	15,156,008
Area under—							
Cotton	15,318,089	14,114,276	11,665,395	13,587,820	15,385,978	17,414,249	18,186,166
Jute	2,709,937	2,472,938	1,505,527	1,446,427	2,329,232	2,737,031	2,923,408
Other fibres	746,440	728,815	683,521	657,645	703,432	8,29,630	910,098
Indigo	242,816	241,461	328,829	277,132	176,676	107,234	133,618
Opium	181,787	123,834	122,888	147,191	142,152	127,452	83,030
Tobacco	1,101,231	932,482	1,050,685	1,032,687	1,025,474	1,065,653	1,064,862
Fodder crops	8,206,286	8,108,016	8,608,219	8,711,642	8,764,333	8,826,438	8,932,358
Yields of—							
Rice (Cleaned) ... *tons.*	32,024,000	27,656,000	33,143,000	33,702,000	28,198,000	30,100,000	30,637,000
Wheat ... „	10,122,000	6,706,000	9,830,000	9,974,000	9,747,000	7,169,000	8,704,000
Coffee ... *lb.*	21,325,000	22,454,000	20,423,000	25,380,000	22,716,000	18,157,900	22,106,700
Tea † ... „	377,055,600	345,339,600	274,263,800	311,639,000	375,355,700	347,862,000†	363,506,600
Cotton ... 400 *lb. bales*	5,799,000	3,600,000	4,485,000	5,073,000	5,979,000	3,812,000	6,250,000
Jute † ... „ „	8,481,300	5,915,000	3,985,000	5,408,000	8,401,000	7,988,000†	8,940,000
Linseed ... *tons.*	419,000	270,000	436,000	533,000	463,000	461,000	401,000
Rape and Mustard ... „	1,153,000	859,000	1,168,000	1,209,000	1,149,000	1,189,000	910,000
Sesamum (til) ... „	449,000	382,000	518,000	481,000	441,000	427,000	426,000
Groundnut ... „	822,000	1,022,000	959,000	1,236,000	1,086,000	1,438,000	1,999,000
Indigo ... *cwt.*	43,300	43,700	67,300	52,100	36,200	17,800	28,200
Cane-sugar ... *tons.*	3,039,000	2,522,000	2,614,000	3,045,000	3,317,000	2,453,000	2,977,000
Rubber † ... *lb.*	13,615,000	13,789,000	9,056,000	11,913,000	14,462,000	8,322,000†	19,970,200

† For Calendar year 1924.

The following is a summary of the various **crop forecasts** relating to the season 1927-28 issued by the Department of Commercial Intelligence and Statistics, India :—

Crop and Forecast.	Tracts comprised in the figures and percentage of total Indian crop represented by them.	Estimated Area.	Per cent. of preceding year (100-figure of same date preceding year.)	Estimated outturn.	Per cent. of preceding year (100-figure of same date preceding year.)
		Acres.			
Jute*—Final.	Bengal, Bihar and Orissa, and Assam (100 per cent. of the total Jute area in India.)	3,371,000	88	10,230,000 bales. (*a*)	84
Cotton—Supplementary.	All cotton growing tracts ..	24,722,000	99·6	5,871,000 bales.	117
Groundnut—Final.	Madras, Burma, Bombay † and Hyderabad (92 per cent. of total groundnut area of India).	5,244,000	121	2,571,000 tons.	126
Sugarcane—Final.	U. P., †Punjab, Bihar and Orissa, Bengal, Madras, Bombay and Sind†, Assam, N.-W. F. Province, C. P. and Berar, Delhi, Mysore and Baroda (About 95 per cent of total sugarcane area of India.)	2,954,000	101	3,221,000 tons.	99
Sesamum—Supplementary.	United Provinces, Burma, Madras, Bombay and Sind†, C. P. and Berar, Bihar and Orissa, Bengal, Punjab, Ajmer-Merwara, Hyderabad, Baroda and Kotah‡ (about 89 per cent. of total sesamum area of India·)	5,445,000	113	544,000 tons.	131
Indigo—Final.	Madras, Punjab, Bihar and Orissa, United Provinces, and Bombay, Sind† (84 per cent. of total indigo area of India.)	60,200	57	11,200 cwts.	53
Rice—Final.	Bengal, Bihar and Orissa, Burma, Madras, United Provinces,† C. P. and Berar,† Assam, Bombay, and Sind†, Coorg, Hyderabad, Mysore, and Baroda (97 per cent. of total rice area of India).	77,790,000	98	27,972,000 tons.	94
Rape and Mustard—Final.	United Provinces, Punjab, Bihar, & Orissa, Bengal, Assam, Bombay (including Sind)†, North-West Frontier Province, Delhi, Alwar,‡ Baroda and Hyderabad (94 per cent. of total rape and mustard area of India.)	5,931,000	107	846,000 tons.	84
Linseed—Final.	Central Provinces and Berar, † United Provinces, Bihar and Orissa, Bombay,† Bengal, Punjab, Hyderabad and Kotah‡ (about 93 per cent. of the total linseed area of India).	3,352,000	101	351,000 tons.	87
Wheat—Final.	Punjab, † United Provinces, † Central Provinces and Berar, † Bombay (including Sind), † Bihar and Orissa, North West Frontier Province, Bengal, Delhi, Ajmer-Merwara, Central India, Gwalior, Rajputana, Hyderabad, Baroda and Mysore (98 per cent. of total wheat area of India).	32,211,000	103	7,762,000 tons.	87
Castor Seed—	(Practically all castor-growing tracts).	1,457,000	104	135,000 tons.	105

(*a*) Includes figures for Nepal.
* Issued by the Director of Agriculture, Bengal. † Including Indian States. ‡ Rajputana.

Irrigation.

The chief characteristics of the Indian rainfall are its unequal distribution over the country, its irregular distribution throughout the seasons and its liability to failure or serious deficiency. The normal annual rainfall varies from 460 inches at Cherrapunji in the Assam hills to less than three inches in Upper Sind. The greatest rainfall actually measured at any station in any one year was 905 inches, recorded at Cherrapunji in 1861, while at stations in Upper Sind it has been nil. There are thus portions of the country which suffer as much from excessive rainfall as others do from drought.

The second important characteristic of the rainfall is its unequal distribution throughout the seasons. Except in the south-east of the peninsula, where the heaviest precipitation is received from October to December, by far the greater portion of the rainfalls during the south-west monsoon, between June and October. During the winter months the rainfall is comparatively small the normal amount varying from half an inch to two inches, while the hot weather, from March to May or June, is practically rainless. Consequently it happens that in one season of the year the greater part of India is deluged with rain and is the scene of the most wonderful and rapid growth of vegetation; in another period the same tract becomes a dreary, sun-burnt waste. The transition from the latter to the former stage often occurs in a few days. From the agricultural point of view the most unsatisfactory feature of the Indian rainfall is its liability to failure or serious deficiency. The average annual rainfall over the whole country is about 45 inches and there is but little variation from this average from year to year, the greatest recorded being only about seven inches. But if separate tracts are considered, extraordinary variations are found. At many stations annual rainfalls of less than half the average are not uncommon, while at some less than a quarter of the normal amount has been recorded in a year of extreme drought.

Scarcity.—Classing a year in which the deficiency is 25 per cent. as a dry year and one in which it is 40 per cent. as a year of severe drought, the examination of past statistics shows that, over the precarious area, one year in five may be expected to be a dry year and one in ten a year of severe drought. It is largely in order to remove the menace of these years that the great irrigation systems of India have been constructed.

Government Works.—The Government irrigation works of India may be divided into two main classes, those provided with artificial storage, and those dependent throughout the year on the natural supplies of the rivers from which they have their origin. In actual fact, practically every irrigation work depends upon storage of one kind or another but, in many cases, this is provided by nature without man's assistance. In Northern India, upon the Himalayan rivers, and in Madras, where the cold weather rains are even heavier than those of the south-west monsoon, the principal non-storage systems are found.

The expedient of storing water in the monsoon for utilization during the subsequent dry weather has been practised in India from time immemorial. In their simplest form, such storage works consist of an earthen embankment costructed across a valley or depression, behind which the water collects, and those under Government control range from small tanks irrigating only a few acres each to the huge reservoirs recently completed in the Deccan which are capable of storing over 20,000 million cubic feet of water. By gradually escaping water from a work of the latter type, a supply can be maintained long after the river on which the reservoir is situated would otherwise be dry and useless.

The Three Classes.—Previously all irrigation works were divided into three classes, Productive, Protective and Minor, but during the triennium 1921-24 the method of determining the source from which the funds for the construction of Government works was provided was changed, and now all works, whether major or minor, for which capital accounts are kept, have been re-classified under two heads, Productive and Unproductive, with a third class embracing areas irrigated by non-capital works. The main criterion to be satisfied before a work can be classed as productive is that it shall, within ten years of the completion of construction, produce sufficient revenue to cover its working expenses and the interest charges on its capital cost. Most of the largest irrigation systems in India belong to the productive class. The total capital outlay direct and indirect on irrigation and navigation works, including works under construction, amounted at the end of the year 1925-26 to Rs. 108 crores.

Unproductive works are constructed primarily with a view to the protection of precarious tracts and to guard against the necessity for periodical expenditure on the relief of the population in times of famine. They are financed from the current revenues of India, generally from the annual grant for famine relief and insurance, and are not directly remunerative, the construction of each such work being separately justified by a comparison of the value of each acre protected (based upon such factors as the probable cost of famine relief, the population of the tract, the area already protected and the minimum area which must be protected in order to tide over a period of severe drought) with the cost of such protection.

Nearly one-eighth of the whole area irrigated in India from Government works is effected by minor works for which no capital account is kept.

Growth of Irrigation.—There has, during the last fifty years, been a steady growth in the area irrigated by Government irrigation works. From 10½ million acres in 1878–79 the area annually irrigated rose to 19½ million acres at the beginning of the century and to 28 million acres in 1919–20, the record year up to that date. This record was, however, again surpassed in the year 1922-23, when the total area irrigated by all classes of works in India, excluding the Indian States, amounted to 28¾ million acres. During the year 1926-27 the total area irrigated by Government works of all classes in British India amounted to some

28.2 million acres which almost approaches the record area of 28¾ million acres irrigated in 1922-23.

The main increase has been in the class of productive works, which irrigated 4½ million acres in 1878-79 and rose to 20,756,209 acres in 1926-27. The area irrigated by unproductive works at the end of 1926-27 was 3,773,272 acres.

The area irrigated in 1926-27 was largest in the Punjab, in which province 10,516,000 acres were irrigated during the year. In addition nearly 670,000 acres were irrigated from channels which although drawing their supplies from British canals, lie wholly in the Indian States. The Madras Presidency came next with an area of 7 million acres, followed by Sind with 3.5 million acres and the United Provinces with nearly 3 million.

Capital and Revenue.—The total capital invested in the works has risen from Rs. 42,36, lakhs in 1900-01 to Rs. 108 crores in 1926-27, an average increase of Rs. 180 lakhs a year. As regards revenue, the Government irrigation works of India, taken as a whole, yield a return of about 6½ per cent. on the capital invested in them ; this is a satisfactory result as Rs. 40,62 lakhs of the total have been spent on unproductive works, most of which return less than 1 per cent. The capital outlay also includes expenditure on a number of large works under construction, which have not yet commenced to earn revenue.

Charges for Water.—The charges for water are levied in different ways in the various provinces. In some, notably in Sind, the ordinary land revenue assessment includes also the charge for water, 9/10ths of this assessment being regarded as due to the canals. In others, as in parts of Madras and Bombay, different rates of land revenue are assessed according to whether the land is irrigated or not, and the assessment upon irrigated land includes also the charge for water. These methods may however be regarded as exceptional. Over the greater part of India water is paid for separately, the area actually irrigated is measured, and a rate is charged per acre according to the crop grown. Lower rates are often levied in cases where irrigation is by "lift", that is to say where the land is too high for the water to flow on to it by gravity and consequently the cultivator has to lift it on to his field.

Various other methods of assessment have been tried, such as by renting outlets for an annual sum, or by charging according to the volume of the water used, but these have never been successful. The cultivator fully understands the principle of "No crops, no charge" which is now followed as far as possible in canal administration, but has no confidence in a system under which his liability for water rate is independent of the area and quality of his crop.

The rates charged vary considerably with the crop grown, and are different in each province and often upon the several canals in a single province. Thus in the Punjab, they vary from Rs. 7-8-0 to Rs. 12 per acre for sugarcane, from Rs. 4 to Rs. 7-8-0 per acre for rice, from Rs. 3-4-0 to Rs. 5-4-0 per acre for wheat, from Rs. 3 to Rs. 4-4-0 per acre for cotton and from Rs. 2 to Rs. 3-4-0 per acre for millets and pulses. No extra charge is made for additional waterings. Practically speaking, Government guarantees sufficient water for the crop and gives it as available. If the crop fails to mature, or if its yield is much below normal, either the whole or part of the irrigation assessment is remitted.

A somewhat different system, the long lease system, is in force in parts of Bengal and the Central Provinces, under which the cultivators pay a small rate for a term of years whether they take water or not. In these provinces where the normal rainfall is fairly high, it is always a question whether irrigation will be necessary at all, and if the cultivators have to pay the full rate, they are apt to hold off until water becomes absolutely essential, and the sudden and universal demand then usually exceeds the supply. By paying a reduced rate every year for a term of years they become entitled to water when required ; consequently there is no temptation to wait till the last possible moment, and the demand is much more evenly distributed throughout the season.

Taken as a whole, irrigation is offered on extremely easy terms, and the water rates represent only a very small proportion of the extra profit which the cultivator secures owing to the water he receives.

Triennial Comparisons.—The average area irrigated in British India by Government works of all clases during the triennium 1924-27 was nearly 28 million acres, which is slightly more than in the previous triennium. The areas for each of the three years were 27,156,399 acres in 1924-25; 28,135,123 acres in 1925-26 and 28,243,879 acres in 1926-27.

The results obtained in each province are given in the table below :—

Provinces.	Average area irrigated in triennium 1921-24.	Average area irrigated in triennium 1924-27.
Madras	7,151,988	7,178,457
Bombay (Deccan)	428,750	437,433
Sind	3,436,321	3,509,484
Bengal	100,492	95,516
United Provinces	2,433,595	2,678,178
Punjab	10,465,404	10,349,121
Burma	1,630,794	1,872,383
Bihar and Orissa	960,505	891,984
Central Provinces	431,580	429,911
North-West Frontier Province	390,849	357,325
Rajputana	19,422	23,272
Baluchistan	23,635	22,070
Total	27,473,335	27,845,134

Productive Works.—Taking productive works only, a triennial comparison is given in the following table. It will be seen that the average area irrigated by such works during the triennium was nearly a million acres more than in the previous period.

Provinces.	Average area irrigated in triennium 1921-24.	Average area irrigated in previous triennium 1924-27.
Madras	3,681,946	3,732,271
Bombay Deccan	2,851	2,699
Sind	2,545,065	2,894,468
United Provinces	2,243,989	2,462,061
Punjab	9,714,815	9,755,740
Burma	1,350,780	1,531,403
Central Provinces	181,632	153,942
North-West Frontier Province	216,814	200,413
Total ..	19,937,892	20,732,997

Taking the productive works as a whole, the capital invested in them was, at the end of 1926-27, Rs. 67,44 lakhs. The net revenue for the year was Rs. 659 lakhs giving a return 9·77 per cent. as compared with 9 per cent. in 1818-19 and 9¾ per cent. in 1919-20. In considering these figures it must be remembered that the capital invested includes the expenditure upon several works which have only lately come into operation and others which are under construction, which classes at present contribute little or nothing in the way of revenue; moreover only receipts from water rates and a share of the enhanced land revenue due to the introduction of irrigation are credited to the canals, so that the returns include nothing on account of the large addition to the general revenues of the country which follows in the wake of their construction.

Unproductive Works.—Turning now to the unproductive works, the areas irrigated in the various provinces during the triennium were as below:—

Provinces.	Average area irrigated in previous triennium 1921-24.	Average area irrigated in triennium 1924-27.
Madras	290,654	271,455
Bombay-Deccan	268,863	277,709
Sind	838,891	527,737
Bengal..	79,121	73,381
United Provinces	180,838	207,312
Punjab	65,844	243,613
Burma..	203,863	268,110
Bihar and Orissa	958,607	889,733
Central Provinces	202,220	230,280
North-West Frontier Province	174,035	156,911
Rajputana	19,422	23,272
Baluchistan	23,635	22,070
Total ..	3,305,993	3,191,588

Non-capital Works.—The results obtained from the non-capital works are given below :—

Provinces.	Average area irrigated in previous triennium, 1921-24.	Average area irrigated in triennium, 1924-27.
Madras	3,179,388	3,174,731
Bombay-Deccan	157,036	157,025
Sind	52,365	87,279
Bengal	21,371	22,135
United Provinces	8,768	8,806
Punjab	684,745	349,768
Burma	76,151	72,870
Bihar and Orissa	1,898	2,246
Central Provinces	47,728	45,689
Total ..	4,229,450	3,920,549

Capital Outlay.—The total capital outlay, direct and indirect, on irrigation and navigation works, including works under construction, amounted at the end of 1926-27 to Rs. 108 crores. The gross revenue for the year was Rs. 11,50 lakhs, and the working expenses Rs. 4,51 lakhs; the net return on capital was therefore 6.47 per cent. Of the several provinces, the return on the capital outlay invested in productive works was highest in the Punjab, where the canals yielded 14·06 per cent. In Madras the percentage of return was 10·64, while in the United Provinces a return of 6·15 per cent. was realised. In considering these figures it must be remembered that the capital invested includes considerable expenditure upon four projects of the first magnitude *viz.*, the Sarda Oudh canals, the Sutlej Valley project, the Lloyd Barrage project and the Cauvery (Mettur) project which were under construction and contributed little or nothing in the way of revenue.

Irrigated Acreage.—A comparison of the acreage of crops matured during 1926–27 by means of Government irrigation systems with the total area under cultivation in the several provinces is given below :—

Provinces.	Net area cropped.	Area irrigated by Government. irrigation works.	Percentage of area irrigated to total cropped area.	Capital cost of Government irrigation & Navigation works to end of 1926-27. In lakhs of rupees.	Estimated value of crops raised on areas receiving State irrigation. In lakhs of rupees.
Madras	37,367,000	7,013,000	18·8	13,25	38,77*
Bombay-Deccan	33,561,000	430,000	1·3	9,74	4,84
Sind	3,961,000	3,507,000	88·5	10,23	9,48
Bengal..	23,546,000	90,000	0·4	4,24	1,21
United Provinces	34,283,000	2,971,000	8·7	19,69	19,55
Punjab	26,179,000	10,516,000	40·2	29,55	45,78
Burma..	16,166,000	1,976,000	12·2	5,85	8,85
Bihar and Orissa	24,252,000	946,000	3·9	6,27	7,20
Central Provinces	17,810,000	395,000	2·2	5,70	2,16
North-West Frontier Provinces	2,426,000	348,000	14·3	2,87	2,35
Rajputana	343,000	31,000	9·0	35	17
Baluchistan	275,000	20,000	7·3	32	5
Total ..	220,169,000	28,243,000	12·8	1,08,06	1,40,41

* Exclusive of the value of crops raised on some 3 million acres irrigated by non-capital works.

Irrigation in 1926-27.—The following table shows the distribution of irrigation in British India during the year 1926-27 under the headings of Productive Works, Unproductive Works and Non-Capital Works:—

Provinces.	Productive Works. Acres.	Unproductive Works. Acres.	Non-Capital Works. Acres.	Total. Acres.
Madras	3,769,600	265,918	2,977,425	7,012,943
Bombay-Deccan	3,044	269,092	157,670	429,806
Sind	2,586,781	838,622	81,625	3,507,028
Bengal	Nil.	68,209	21,560	89,769
United Provinces	2,729,026	230,857	10,844	2,970,727
Punjab	9,848,048	327,919	339,982	10,515,949
Burma	1,564,859	334,617	76,873	1,976,349
Bihar and Orissa	Nil.	943,506	2,867	946,373
Central Provinces	64,923	284,748	45,552	395,223
N.-W. Frontier	189,928	158,009	Nil.	347,937
Rajputana	Nil.	31,340	Nil.	31,340
Baluchistan	Nil.	20,435	Nil.	20,435
Total ..	20,756,209	3,773,272	3,714,398	28,243,879

The area of 9,848,048 acres irrigated by productive works in the Punjab during 1926-27 is the highest on record in that province, the increase being attributable to steady development of irrigation on the Lower Chenab, Lower Jhelum, and Lower Bari Doab Canals.

New Works.—Two major works of exceptional importance are now under construction namely the Sukkur Barrage, and Canals, in Sind, and the Sutlej Valley Canals in the Punjab. The Sukkur Barrage, when completed, will be the greatest work of its kind in the world, measuring 4,725 feet between the faces of the regulators on either side. The total cost of the scheme is estimated at Rs. 1,835 lakhs, of which the barrage accounts for about Rs. 569 lakhs and the canals for Rs. 1,266 lakhs. A gross area of 7½ million acres is commanded, of which 6½ million acres is culturable and an annual area of irrigation of 5¼ million acres is anticipated, of which 2 million acres represent existing inundation irrigation which will be given an assured supply by the new canals. The ultimate annual net revenue forecasted as obtainable from the project, after paying working expenses, is Rs. 194 lakhs, which represents a return of 10½ per cent. on capital. This is the return from water rates alone, but a further large increase in general revenues may safely be reckoned upon from the area of 3 million acres of waste which will be brought under cultivation. There will be increases on this account under practically every head of revenue, such as railways, customs, stamps, excise and the like, not to mention the addition to the country's wealth owing to the production, on land at present barren, of crops to the value of Rs. 2,500 lakhs per annum.

The Sutlej Valley Works consist of four weirs, three on the Sutlej and one on the Panjab, as the Chenab is called below its junction with the Sutlej, with twelve canals taking off from above them. The total area to be irrigated is 5,108,000 acres, or nearly 8,000 square miles. Of this, 2,075,000 acres are perennial and 3,033,000 acres non-perennial irrigation. 1,942,000 acres are in British territory, 2,825,000 acres in Bahawalpur and 341,000 acres in Bikaner.

The total cost of the scheme was estimated at Rs. 1,460 lakhs. Upon this a return of 12¾ per cent. is anticipated from water-rates alone. But the scheme has another, and even more important source of revenue. On the introduction of irrigation, no less than 3¾ million acres of desert waste, the property of the three parties concerned, at present valueless, will become available for colonisation and sale. It is customary, in the *pro-forma* accounts of irrigation projects, to credit a scheme with the interest on the sale proceeds of Crown waste lands rendered culturable by its construction; if this is included, the annual return on the works will amount to nearly 38 per cent. It bids fair, indeed, to rival the Lower Chenab Canal, the return from which was more than 55 per cent. in 1926-27 These anticipations may need modification, however, in view of the fact that a revised estimate for the project amounts to Rs. 2,376 lakhs.

The Cauvery Reservoir project, which will cost over 6 crores of rupees and will extend irrigation to a new area of 301,000 acres, was sanctioned by the Secretary of State in 1925. In Bombay Presidency the Bhandardara Dam, 270 feet in height, was completed at the end of 1925 and the Bhatgar Dam at the end of 1926. The Damodhar River (Canal) project, which will irrigate 180,000 acres of rice lands in the Burdwan and Hooghly Districts of Bengal was commenced during the year 1926-27. Excellent progress has been made with the Sarda-Oudh Canals in the United Provinces and the system was inaugurated by H. E. the Viceroy in the autumn of 1928. This project will irrigate more than a million acres.

A comprehensive irrigation programme extending over a period of 14 years has been commenced in the Central Provinces. The possibility of increasing irrigation in the North West Frontier Province is being investigated.

WELLS AND TANKS.

So far we have dealt only with the great irrigation schemes. They are essentially exotic, the products of British rule; the real eastern instrument is the well. The most recent figures give thirty per cent. of the irrigated area in India as being under wells. Moreover the well is an extremely efficient instrument of irrigation. When the cultivator has to raise every drop of water which he uses from a varying depth, he is more careful in the use of it; well water exerts at least three times as much duty as canal water. Again, owing to the cost of lifting, it is generally used for high grade crops. It is estimated that well-irrigated lands produce at least one-third more than canal-watered lands. Although the huge areas brought under cultivation by a single canal scheme tend to reduce the disproportion between the two systems, it must be remembered that the spread of canals increases the possibilities of well irrigation by adding, through seepage, to the store of subsoil water and raising the level.

Varieties of Wells.—Wells in India are of every description. They may be just holes in the ground, sunk to subsoil level, used to a year or two and then allowed to fall into decay. These are temporary or kacha wells. Or they may be lined with timber, or with brick or stone. They vary from the kacha well costing a few rupees to the masonry well, which will run into thousands, or in the sandy wastes of Bikanir, where the water level is three hundred feet below the surface, to still more. The means of raising the water vary in equal degree. There is the *picottah,* or weighted lever, raising a bucket at the end of a pivoted pole, just as is done on the banks of the Nile. This is rarely used for lifts beyond fifteen feet. For greater lifts bullock power is invariably used. This is generally harnessed to the *mot,* or leather bag, which is passed over a pulley overhanging the well, then raised by bullocks who walk down a ramp of a length approximating to the depth of the well. Sometimes the *mot* is just a leather bag, more often it is a self-acting arrangement, which discharges the water into a sump automatically on reaching the surface. By this means from thirty to forty gallons of water are raised at a time, and in its simplicity, and the ease with which the apparatus can be constructed and repaired by village labour, the *mot* is unsurpassed in efficiency. There is also the Persian wheel, an endless chain of earthenware pots running round a wheel. Recently attempts have been made, particularly in Madras, to substitute mechanical power, furnished by oil engines, for the bullock. This has been found economical where the water supply is sufficiently large, especially where two or three wells can be linked. Government have systematically encouraged well irrigation by advancing funds for the purpose and exempting well watered lands from extra assessment due to improvement. These advances, termed *takavi,* are freely made to approved applicants, the general rate of interest being 6¼ per cent. In Madras and Bombay ryots who construct wells, or other works of agricultural improvement, are exempt from enhanced assessment on that account. In other provinces the exemption lasts for specific periods, the term generally being long enough to recoup the owner the capital sunk.

Tanks.—Next to the well, the indigenous instrument of irrigation is the tank The village or the roadside tank is one of the most conspicuous features in the Indian scene. The Indian tank may be any size. It may vary from a great work like Lakes Fife and Whiting in the Bombay Presidency or the Periyar Lake in Travancore. holding up from four to seven billion cubic feet of water, and spreading their waters through great chains of canal, to the little village tank irrigating ten acres. They date back to a very early stage in Indian civilisation. Some of these works in Madras are of great size, holding from three to four billion cubic feet, with water spreads of nine miles. The inscriptions of two large tanks in the Chingleput district of Madras, which still irrigate from two to four thousand acres are said to be over 1,100 years old. Tank irrigation is practically unknown in the Punjab and in Sind, but it is found in some form or other in all other provinces, including Burma, and finds its highest development in Madras. In the ryotwari tracts of Bombay and Madras all but the smallest tanks are controlled by Government. In the zemindari tracts only the large tanks are State works. According to the latest figures the area irrigated from tanks is about eight million acres, but in many cases the supply is extremely precarious. So far from tanks being a refuge in famine they are often quite useless inasmuch as the rainfall does not suffice to fill them and they remain dry throughout the season.

Bibliography.—Triennial Review of Irrigation in India, 1925-1927. Calcutta. Superintendent of Government Printing. Price One Rupee. The annual irrigation reports in India used to be as arid as the Sahara, consisting of a dull statistical record. They have been greatly improved of recent years and have now assumed a quite satisfactory form. The major review appears once every three years. The first of these triennial reviews was issued in 1922. Between the triennial reviews there is issued a briefer statement recording the progress of each particular year.

Meteorology.

The meteorology of India like that of other countries is largely a result of its geographical position. The great land area of Asia to the northward and the enormous sea expanse of the Indian Ocean to the southward are determining factors in settling its principal meteorological features. When the Northern Hemisphere is turned away from the sun, in the northern winter, Central Asia becomes an area of intense cold. The meteorological conditions of the temperate zone are pushed southward and we have over the northern provinces of India the westerly winds and eastward moving cyclonic storms of temperate regions, while, when the Northern Hemisphere is turned towards the sun, Southern Asia becomes a super-heated region drawing towards it an immense current of air which carries with it the enormous volume of water vapour which it has picked up in the course of its long passage over the wide expanse of the Indian Ocean, so that at one season of the year parts of India are deluged with rain and at another persistent dry weather prevails.

Monsoons.—The all-important fact in the meteorology of India is the alternation of the seasons known as the summer and winter monsoons. During the winter monsoon the winds are of continental origin and hence, dry, fine weather, clear skies, low humidity and little air movement are the characteristic features of this season. The summer rains cease in the provinces of the North-West Frontier Province and the Punjab about the middle of September after which cool westerly and northerly winds set in over that area and the weather becomes fresh and pleasant. These fine weather conditions extend slowly eastward and southward so that by the middle of October, they embrace all parts of the country except the southern half of the Peninsula, and by the end of the year have extended to the whole of the Indian land and sea area, the rains withdrawing to the Equatorial Belt. Thus the characteristics of the cold weather from October to February over India are:—Westerly winds of the temperate zone over the extreme north of India; to the south of these the north-east winds of the winter monsoon or perhaps more properly the north-east Trades and a gradually extending area of fine weather which, as the season progresses, finally embraces the whole Indian land and sea area. Two exceptions to these fine weather conditions exist during this period, *viz.*; the Madras coast and the north-west of India. In the former region the north-east winds which set in over the Bay of Bengal in October coalesce with the damp winds of the retreating summer monsoon, which current curves round over the Bay of Bengal, and blowing directly on to the Madras coast gives to that region the wettest and most disturbed weather of the whole year, for while the total rainfall for the four months June to September, *i.e.*, the summer monsoon, at the Madras Observatory amounts to 15·36 inches the total rainfall for the three months October to December amounts to 29·48 inches. The other region in which the weather is unsettled, during this period of generally settled conditions, is North-west India. This region during January, February and part of March is traversed by a succession of shallow storms from the westward. The number and character of these storms vary very largely from year to year and in some years no storms at all are recorded. In normal years, however, in Northern India periods of fine weather alternate with periods of disturbed weather (occurring during the passage of these storms) and light to moderate and even heavy rain occurs. In the case of Peshawar the total rainfall for the four months, December to March, amounts to 5·26 inches while the total fall for the four months, June to September, is 4·78 inches, showing that the rainfall of the winter is, absolutely, greater in this region than that of the summer monsoon. These two periods of subsidiary "rains" are of the greatest economic importance. The fall in Madras is, as shown above, of considerable actual amount, while that of North-west India though small in absolute amount is of the greatest consequence as on it largely depend the grain and wheat crops of Northern India.

Spring Months.—March to May and part of June form a period of rapid continuous increase of temperature and decrease of barometric pressure throughout India. During this period there occurs a steady transference northward of the area of greatest heat. In March the maximum temperatures, slightly exceeding 100, occur in the Deccan; in April the area of maximum temperature, between 100° and 105°, lies over the south of the Central Provinces and Gujarat; in May maximum temperatures, varying between 105° and 110°, prevail over the greater part of the interior of the country while in June the highest mean maximum temperatures exceeding 110° occur in the Indus Valley near Jacobabad. Temperatures exceeding 120° have been recorded over a wide area including Sind, Rajputana: the West and South Punjab and the west of the United Provinces, but the highest temperature hitherto recorded is 126° registered at Jacobabad on June 12th, 1897. During this period of rising temperature and diminishing barometric pressure, great alterations take place in the air movements over India, including the disappearance of the north-east winds of the winter monsoon, and the air circulation over India and its adjacent seas, becomes a local circulation, characterised by strong hot winds down the river valleys of Northern India and increasing land and sea winds in the coast regions. These land and sea winds, as they become stronger and more extensive, initiate large contrasts of temperature and humidity which result in the production of violent local storms. These take the forms of dust storms in the dry plains of Northern India and of thunder and hailstorms in regions where there is inter-action between damp sea winds and dry winds from the interior. These storms are frequently accompanied with winds of excessive force, heavy hail and torrential rain and are on that account very destructive.

By the time the area of greatest heat has been established over North-west India, in the last week of May or first of June, India has become the seat of low barometric pressures relatively to the adjacent seas and the whole

character of the weather changes. During the hot weather period, discussed above, the winds and weather are mainly determined by local conditions. Between the Equator and Lat. 30° or 35° south the wind circulation is that of the south-east trades, that is to say from about Lat. 30°-35° south a wind from south-east blows over the surface of the sea up to about the equator. Here the air rises into the upper strata to flow back again at a considerable elevation to the Southern Tropic or beyond. To the north of this circulation, *i.e.*, between the Equator and Lat. 20° to 25° North, there exists a light unsteady circulation, the remains of the north-east trades, that is to say about Lat. 20° North there is a north-east wind which blows southward till it reaches the thermal equator where side by side with the south-east Trades mentioned above, the air rises into the upper strata of the atmosphere. Still further to the northward and in the immediate neighbourhood of land there are the circulations due to the land and sea breezes which are attributable to the difference in the heating effect of the sun's rays over land and sea. It is now necessary to trace the changes which occur and lead up to the establishment of the south-west monsoon period. The sun at this time is progressing slowly northward towards the northern Tropic. Hence the thermal equator is also progressing northward and with it the area of ascent of the south-east trades circulation. Thus the south-east trade winds cross the equator and advance further and further northward, as the thermal equator and area of ascent follows the sun in its northern progress. At the same time the temperature over India increases rapidly and barometric pressure diminishes, owing to the air rising and being transferred to neighbouring cooler regions—more especially the sea areas. Thus we have the southern Trades circulation extending northward and the local land and sea circulation extending southward until about the beginning of June the light unsteady interfering circulation over the Arabian Sea finally breaks up, the immense circulation of the south-east Trades, with its cool, moisture laden winds rushes forward, becomes linked on to the local circulation proceeding between the Indian land area and the adjacent seas and India is invaded by oceanic conditions—the **south-west monsoon** proper. This is the most important season of the year as upon it depends the prosperity of at least five-sixths of the people of India.

When this current is fully established a continuous air movement extends over the Indian Ocean, the Indian seas and the Indian land area from Lat. 30° S. to Lat. 30° N. the southern half being the south-east trades and the northern half the south-west monsoon. The most important fact about it is that it is a continuous horizontal air movement passing over an extensive oceanic area where steady evaporation is constantly in progress so that where the current enters the Indian seas and flows over the Indian land it is highly charged with aqueous vapours.

The current enters the Indian seas quite at the commencement of June and in the course of the succeeding two weeks spreads over the Arabian Sea and Bay of Bengal up to their extreme northern limits. It advances over India from these two seas. The Arabian Sea current blows on to the west coast and sweeping over the Western Ghats prevails more or less exclusively over the Peninsula, Central India, Rajputana and north Bombay. The Bay of Bengal current blows directly up the Bay. One portion is directed towards Burma; East Bengal and Assam while another portion curves to south at the head of the Bay and over Bengal, and then meeting with the barrier of the Himalayas curves still further and blows as a south-easterly and easterly wind right up the Gangetic plain. The south-west monsoon continues for three and a half to four months, *viz.*, from the beginning of June to the middle or end of September. During its prevalence more or less general though far from continuous rain prevails throughout India, the principal features of the rainfall distribution being as follows. The greater portion of the Arabian Sea current, the total volume of which is probably three times as great as that of the Bengal current, blows directly on to the west coast districts. Here it meets an almost continuous hill range, is forced into ascent and gives heavy rain alike to the coast districts and to the hilly range, the total averaging about 100 inches most of which falls in four months. The current after parting with most of its moisture advances across the Peninsula giving occasional uncertain rain to the Deccan and passes out into the Bay where it coalesces with the local current. The northern portion of the current blowing across the Gujarat, Kathiawar and Sind coasts gives a certain amount of rain to the coast districts and frequent showers to the Aravalli Hill range but very little to Western Rajputana, and passing onward gives moderate to heavy rain in the Eastern Punjab, Eastern Rajputana and the North-west Himalayas. In this region the current meets and mixes with the monsoon current from the Bay.

The monsoon current over the southern half of the Bay of Bengal blows from south west and is thus directed towards the Tenasserim hills and up the valley of the Irrawady to which it gives very heavy to heavy rain. That portion of this current which advances sufficiently far northward to blow over Bengal and Assam gives very heavy rain to the low-lying districts of East Bengal and immediately thereafter coming under the influence of the Assam Hills is forced upwards and gives excessive rain (perhaps the heaviest in the world) to the southern face of these hills. The remaining portion of the Bay current advances from the southward over Bengal, is then deflected westward by the barrier of the Himalayas and gives general rain over the Gangetic plain and almost daily rain over the lower ranges of the Himalayas from Sikhim to Kashmir.

To the south of this easterly wind of the Bay current and to the north of the westerly wind of the Arabian Sea current there exists a debatable area running roughly from Hissar in the Punjab through Agra, Allahabad and part of Chota Nagpur to Orissa, where neither current of the monsoon prevails. In this area the rainfall is uncertain and would probably

be light, but that the storms from the Bay of Bengal exhibit a marked tendency to advance along this track and to give it heavy falls of occasional rain.

The total rainfall of the monsoon period (June to September) is 100 inches over part of the west coast, the amount diminishes eastward, is below 20 inches over a large part of the centre and east of the Peninsula and is only 5 inches in South Madras; it is over 100 inches on the Tenasserim and South Burma coast and decreases to 20 inches in Upper Burma; it is over 100 in the north Assam Valley and diminishes steadily westward and is only 5 inches in the Indus Valley.

The month to month distribution for the whole of India is:—

May ..	.. 2·6	inches.
June ..	.. 8·3	,,
July ..	..11·9	,,
August ..	..10·5	,,
September	.. 7·2	,,
October ..	.. 3·2	,,

Cyclonic storms and cyclones are an almost invariable feature of the monsoon period. In the Arabian Sea they ordinarily form at the commencement and end of the season, *viz.*, May and November, but in the Bay they form a constantly recurring feature of the monsoon season. The following gives the total number of storms recorded during the period 1877 to 1901 and shows the monthly distribution:—

	Jan.	Feb.	Mar.	Apl.	May	June
Bay of Bengal	..	..	1	4	13	28

	July	Aug.	Sep.	Oct.	Nov.	Dec.
Bay of Bengal	41	36	45	34	22	8

	Jan.	Feb.	Mar.	Apl.	May	June
Arabian Sea	..	..	..	..	2	15

	July	Aug.	Sep.	Oct.	Nov.	Dec.
Arabian Sea	2	..	1	1	5	..

The preceding paragraphs give an account of the normal procession of the seasons throughout India during the year, but it must be remembered, that every year produces **variations from the normal**, and that in some years these variations are very large. This is more particularly the case with the discontinuous element rainfall. The most important variations in this element which may occur are:—

(1) Delay in the commencement of the rains over a large part of the country, this being most frequent in North Bombay and North-west India.

(2) A prolonged break in July or August or both.

(3) Early termination of the rains, which may occur in any part of the country.

(4) The determination throughout the monsoon period of more rain than usual to one part and less than usual to another part of the country. Examples of this occur every year.

About the middle of September fine and fresh weather begins to appear in the extreme north-west of India. This area of fine weather and dry winds extends eastward and southward, the area of rainy weather at the same time contracting till by the end of October the rainy area has retreated to Madras and the south of the Peninsula and by the end of December has disappeared from the Indian region; fine clear weather prevailing throughout. This procession with the numerous variations and modifications which are inseparable from meteorological conditions repeats itself year after year.

(*For monsoon of* 1928, *see page* 367).

Average Monthly and Annual Means of Air Temperature at Selected Stations in India.

Stations.	Elevation in feet	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Mean.
HILL STATIONS.	°	°	°	°	°	°	°	°	°	°	°	°	°	°
*Shillong	4,920	49.5	51.8	60.4	65.2	66.6	68.8	70.0	69.2	68.4	63.1	56.5	50.7	61.7
Darjeeling	7,376	40.1	41.6	49.7	56.2	58.3	59.9	61.5	60.9	59.4	55.2	47.8	41.8	52.7
Simla	7,224	38.8	40.6	51.5	59.3	66.0	66.9	64.3	62.8	60.9	56.7	50.1	43.4	55.1
Murree	6,333	40.5	41.1	51.1	61.2	68.3	72.3	69.4	67.2	65.9	61.3	52.8	45.0	58.0
Srinagar	5,204	30.7	33 0	45.1	55.7	63.9	69.9	73.0	70.8	64.0	53.2	44.0	36.3	53.3
Mount Abu	3,945	58.2	61.0	69.9	78.0	79.8	74.9	69.8	67.6	69.6	71.6	65.2	59.9	68.8
*Ootacamund	7,327	54.0	55.5	58.6	61.5	61.3	58.2	56.9	57.4	57.3	57.2	55.4	54.3	57.3
*Kodaikanal	7,688	55.0	56.7	59.6	61.5	61.9	59.4	57.6	57.8	57.6	56.9	54.9	55.0	57.8
COAST STATIONS.														
Karachi	49	65.3	68.4	75.0	80.6	84.7	86.8	84.3	82.4	82.0	80.0	74.0	67.4	77.6
Veraval	18	69.4	70.2	74.0	79.1	81.5	82.5	80.0	79.1	79.0	79.5	77.2	72.3	77.0
Bombay	37	74.5	74.8	78.0	82.1	84.6	82.4	79.5	79.4	79.4	80.7	79.3	76.4	79.3
Ratnagiri	110	76.2	76.0	78.5	82.8	84.3	80.7	78.3	78.4	78.2	79.8	79.5	77.6	79.2
Mangalore	65	78.2	79.3	81.1	83.9	83.5	78.8	77.1	77.3	77.6	78.9	79.8	79.0	79.6
Calicut	27	77.8	79.8	81.6	83.6	83.1	78.5	76.7	77.4	78.3	79.1	79.5	78.3	75.9
Negapatam	31	75.5	77.4	80.5	84.8	87.7	87.0	85.6	84.4	83.4	80.9	78.3	76.0	81.8
Madras	22	75.3	76.6	79.5	84.1	88.7	88.4	85.7	84.5	83.9	80.8	77.9	75.7	81.8
Masulipatam	15	73.6	76.7	80.3	85.2	89.8	87.8	83.9	83.4	83.0	81.2	77 4	74.0	81.4
Gopalpur	21	70.0	74.8	78.3	81.6	84.1	83.7	81.8	82.0	82.2	79.6	74 3	69.8	78.6
Rangoon	57	74.7	77.3	81.2	85.0	82.2	79.5	78.8	78.7	79.1	80.0	78 3	75.6	79.2

* As the average mean figures for Shillong, Ootacamund and Kodaikanal are not available, means of normal maximum and minimum temperatures uncorrected for diurnal variation are given.

Average Monthly and Annual Means of Air Temperature at Selected Stations in India.

Stations	Elevation in feet.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Mean.
STATIONS ON THE PLAINS.		°	°	°		°	°	°	°	°	°	°	°	°
Toungoo	183	70.0	74.7	81.9	86.7	85.3	81.3	80.1	80.1	81.3	81.4	77.4	71.6	79.3
Mandalay	250	68.8	73.8	82.1	89.2	88.5	85.4	85.2	84.7	83.5	82.5	75.9	69.5	80.8
Silchar	104	63.8	67.0	73.9	78.0	80.1	81.4	82.6	82.4	81.7	79.7	73.1	66.1	75.9
Calcutta	21	65.2	70.3	79.3	85.0	85.7	84.5	83.0	82.4	82.6	80.0	72.4	65.3	77.9
Burdwan	99	65.7	70.0	80.4	86.7	86.5	84.9	83.6	82.8	83.1	80.7	73.0	66.3	78.6
Patna	183	60.8	65.3	76.9	86.2	88.0	86.4	83.5	83.1	83.3	70.5	70.1	62.2	77.1
Benares	267	60.0	65.3	76.6	86.8	91.3	89.4	84.1	83.1	83.0	77.9	67.8	60.2	77.2
Allahabad	309	59.5	64.9	76.8	87.6	92.5	90.8	84.5	83.2	83.0	77.6	67.5	59.8	77.3
Lucknow	368	58.7	63.7	75.2	86.4	90.6	90.2	85.3	83.4	83.2	77.1	66.3	58.9	76.6
Agra	555	60.1	64.8	76.7	88.1	94.0	93.4	86.0	84.2	84.2	79.4	68.7	61.2	78.4
Meerut	738	56.0	60.1	71.1	82.7	88.4	89.4	85.0	83.2	81.7	74.7	63.5	56.7	74.4
Delhi	718	57.9	62.2	74.1	86.2	91.7	92.2	86.4	84.5	83.9	78.5	67.6	59.6	77.1
Lahore	702	53.0	57.3	69.0	80.9	88.9	93.0	89.1	87.1	84.8	75.7	63.2	54.6	74.7
Multan	420	55.6	59.8	71.6	82.9	91.4	94.9	92.7	90.4	88.0	78.6	67.1	57.7	77.5
Jacobabad	186	57.3	62.4	74.5	85.5	94.2	97.7	95.0	91.6	88.8	79.2	67.5	58.9	79.3
Hyderabad (Sind)	96	63.6	67.1	77.6	86.2	91.6	91.7	88.6	86.0	86.0	82.7	73.4	65.0	79.9
Bikaner	771	59.2	63.6	76.6	88.4	94.1	94.7	90.4	87.3	87.4	82.4	70.5	61.4	79.6
Rajkote	429	66.8	70.0	77.4	85.1	89.2	87.5	81.7	80.6	80.8	80.4	74.1	68.4	78.5
Ahmedabad	163	70.3	74.0	82.7	91.2	92.9	89.4	83.7	83.0	83.5	84.3	78.3	72.9	82.1
PLATEAU STATIONS.														
Akola	930	68.5	73.7	81.9	90.1	93.3	86.2	80.6	78.9	79.7	77.9	71.7	66.8	79.2
Jubbulpore	1,327	61.8	66.8	76.5	86.3	91.9	85.7	79.0	78.0	79.0	74.8	66.6	60.3	75.6
Nagpore	1,025	68.8	74.3	82.4	90.6	94.5	86.6	80.4	79.4	80.4	78.4	72.2	67.1	79.6
Raipur	970	67.7	73.6	81.9	90.3	93.6	86.0	79.6	79.0	80.3	78.1	71.5	66.0	79.0
Ahmednagar	2,152	67.1	71.3	77.5	82.5	83.8	79.2	76.2	74.9	74.5	75.1	70.5	67.1	75.0
Poona	1,840	69.8	73.9	80.1	83.9	83.8	78.7	74.9	73.7	74.4	76.2	72.5	68.9	75.9
Sholapur	1,590	72.7	77.7	84.2	88.4	88.9	81.8	78.9	77.7	77.3	77.7	74.6	71.3	79.3
Belgaum	2,539	69.8	73.0	77.5	79.2	78.0	72.8	70.1	69.7	70.4	72.9	70.9	69.3	72.8
Hyderabad (Deccan)	1,690	70.4	77.1	83.1	88.0	90.1	82.6	77.9	77.1	77.4	76.8	72.3	69.1	78.5
Bangalore	3,021	67.5	72.0	76.7	79.9	78.5	74.0	72.0	71.8	71.8	71.8	69.6	67.5	72.8
Bellary	1,475	73.2	79.6	85.6	89.2	89.0	83.4	80.9	80.6	80.2	79.1	75.3	72.5	80.8

Average Monthly and Annual Rainfall at Selected Stations in India.

Stations.	Elevation in feet.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Total.
HILL STATIONS.														
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Shillong	4,920	0.49	0.81	1.85	4.29	10.06	16.46	13.48	12.79	14.75	6.23	0.98	0.25	82.44
Darjeeling	7,376	0.76	1.08	2.01	4.08	7.83	24.19	31.74	25.98	18.34	5.35	0.24	0.20	121.80
Simla	7,224	3.21	3.07	2.48	2.32	3.71	7.84	18.42	17.87	6.17	1.19	0.41	1.28	67.97
Murree	6,333	3.73	4.14	3.96	3.62	2.99	3.41	12.51	13.40	5.64	1.86	1.27	1.37	57.90
Srinagar	5,204	3.36	4.24	3.10	3.30	2.72	1.77	2.78	1.95	1.18	1.14	0.41	1.08	27.03
Mount Abu	3,945	0.27	0.31	0.15	0.08	0.97	5.59	22.05	21.51	9.58	1.46	0.28	0.24	62.49
Ootacamund	7,327	0.35	0.38	1.00	3.46	5.93	6.18	5.94	4.70	4.44	8.57	4.00	1.65	46.60
Kodaikanal	7,688	1.17	1.48	3.59	5.29	6.47	4.01	3.89	5.99	6.70	12.49	8.17	5.57	64.82
COAST STATIONS.														
Karachi	49	0.64	0.30	0.15	0.13	0.03	0.43	3.16	1.77	0.66	0.04	0.16	0.19	7.66
Veraval	18	0.01	0.03	0.00	0.00	0.02	5.31	8.92	7.27	2.40	0.81	0.66	0.10	25.53
Bombay	37	0.12	0.02	0.01	0.05	0.55	20.56	24.56	14.91	10.93	1.76	0.47	0.05	73.99
Ratnagiri	110	0.60	0.02	0.05	0.15	1.27	31.32	34.25	20.19	12.53	3.62	0.65	0.06	104.71
Mangalore	65	0.13	0.07	0.11	2.06	7.26	38.47	37.39	22.88	11.09	7.90	1.97	0.50	129.83
Calicut	27	0.17	0.16	0.79	3.70	9.04	36.46	29.36	14.89	7.39	9.12	3.80	1.32	116.20
Negapatam	31	1.15	0.72	0.32	1.02	1.81	1.30	1.74	3.29	3.55	10.08	15.02	11.23	51.23
Madras	22	0.83	0.28	0.37	0.65	1.96	2.06	3.80	4.66	4.84	10.93	13.30	5.25	48.93
Masulipatam	15	0.17	0.16	0.26	0.40	1.34	4.33	5.67	6.09	6.56	8.36	4.43	0.53	38.30
Gopalpur	21	0.23	0.43	0.56	0.73	2.01	5.76	6.11	7.20	6.86	9.81	3.50	0.72	43.95
Rangoon	57	0.11	0.23	0.16	1.74	11.73	18.30	21.37	19.65	15.89	7.12	2.52	0.07	98.89

Average Monthly and Annual Rainfall at Selected Stations in India.

Stations.	Elevation in feet.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Total.
STATIONS ON THE PLAINS.		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Toungoo	183	0.06	0.12	0.08	1.90	6.43	13.63	17.48	18.53	11.46	6.95	1.25	0.16	78.05
Mandalay	250	0.06	0.08	0.21	1.19	5.26	5.71	3.26	4.1C	6.21	4.54	1.67	0.28	32.63
Silchar	104	9.64	2.32	7.93	13.56	15.72	20.39	19.98	18.69	13.95	6.40	1.31	0.54	121.43
Calcutta	21	0.29	1.02	1.14	1.54	5.60	11.04	12.31	12.69	10.40	3.87	0.62	0.31	60.83
Burdwan	99	0.38	0.89	1.24	2.20	5.56	10.17	12.32	11.49	8.59	3.93	0.61	0.13	57.54
Patna	183	0.72	0.53	0.35	0.30	1.70	7.76	11.41	10.72	7.82	2.89	0.20	0.14	44.54
Benares	267	0.74	0.51	0.33	0.15	0.56	5.45	12.54	11.19	6.54	2.24	0.17	0.17	40.59
Allahabad	309	0.82	0.48	0.38	0.14	0.29	5.09	12.24	10.83	6.32	2.40	0.25	0.23	39.52
Lucknow	368	0.90	0.45	0.32	0.11	0.91	5.34	11.39	11.32	6.61	1.33	0.08	0.44	39.20
Agra	555	0.55	0.33	0.25	0.16	0.64	2.84	9.67	7 11	4.41	0.39	0.06	0.20	26.70
Meerut	738	1.05	0.83	0.63	0.34	0.70	3.60	9.37	7.64	4.55	0.43	0.08	0.40	29.62
Delhi	718	1.02	0.61	0.67	0.35	0.71	3.18	8.38	7.44	4.42	0.39	0.10	0.43	27.70
Lahore	702	0.87	1.13	0.89	0.51	0.80	1.86	6.65	4.88	2.10	0.43	0.11	0.47	20.70
Multan	420	0.39	0.36	0.42	0.27	0.39	0.43	2.19	1.66	0.60	0.07	0.06	0.27	7.11
Jacobabad	186	0.28	0.27	0.25	0.17	0.15	0.10	1.18	1.25	0.19	0.01	0.10	0.15	4.10
Hyderabad (Sind)	96	0.24	0.22	0.10	0.07	0.11	0.41	2.61	2.77	0.54	0.00	0.10	0.05	7.22
Bikaner	771	0.38	0.24	0.18	0.14	0.84	1.65	3.29	3.14	1.08	0.09	0.06	0.18	11.27
Rajkote	429	0.05	0.10	0.01	0.01	0.31	5.21	10.89	6.41	3.75	0.67	0.33	0.06	27.80
Ahmedabad	163	0.02	0.10	0.01	0.03	0.46	3.94	11.49	8.26	4.42	0.55	0.19	0.05	29.52
PLATEAU STATIONS.														
Akola	930	0.45	0.18	0.43	0.16	0.31	5.12	8.74	6.48	6.24	2.14	0.44	0.58	31.27
Jubbulpore	1,327	0.72	0.52	0.48	0.22	0.47	8.53	18.82	15.13	8.38	1.55	0.37	0.26	55.45
Nagpore	1,025	0.58	0.42	0.57	0.46	0.68	8.44	13.49	9.79	8.11	2.14	0.51	0.45	45.62
Raipur	970	0.30	0.33	0.59	0.59	0.76	9.38	14.94	12.72	7.75	2.09	0.62	0.20	50.27
Ahmednagar	2,152	0.27	0.12	0.15	0.40	1.16	4.73	3.03	3.60	6.75	3.12	0.89	0.44	24.66
Poona	1,840	0.18	0.05	0.13	0.58	1.45	5.35	6.90	4.03	4.43	4.11	0.85	0.20	28.26
Sholapur	1,590	0.06	0.08	0.29	0.63	1.09	4.41	4.19	5.42	7.77	3.63	0.87	0.30	28.74
Belgaum	2,539	0.06	0.03	0.49	2.05	2.73	9.32	15.37	9.15	4.05	5.09	1.33	0.24	49.91
Hyderabad (Deccan)	1,690	0.05	0.12	0.67	0.73	0.78	4.44	6.22	6.76	7.10	2.98	1.53	0.17	31.55
Bangalore	3,021	0.06	0 22	0.72	1.19	4.53	3.13	4.13	6.00	7.11	6.74	2.61	0.39	36.83
Bellary	1,475	0.10	0.03	0.42	0.83	1.93	1.84	1.41	2.18	4.12	4.04	1.20	0.20	18.30

MONSOON OF 1928.

The S.-W. Monsoon of the year was weak in its incidence throughout the season and though on the whole the rainfall gathered over the major portion of the Continent was fairly normal, that over North-Western India and over the extreme South of the Peninsula remained in serious defect. In the Northern Divisions of the country in Sind, Punjab, United Provinces, and the North-West Frontier Province conditions of drought virtually prevailed throughout all the monsoon months. The current on the Arabian Sea side was established on the Malabar Coast by the 3rd June almost a week later than the normal date. The belated pulses however rapidly extended northwards to the Konkan Coast on the 4th and into the Deccan on the 5th, and vigorously penetrating further into the central parts of the country well on upto Rajputana, gave fairly heavy rains over a major portion of its field of activity. The advance however was not well sustained and though the current continued normally active during the rest the month over the Konkan and in the Deccan, it was too attenuated to be of much effective service in other parts of its field.

The Bay Branch of the current was established and actively advanced into Burma during the last week in May; and further strengthened by a depression rising off the Bay between the 6th and 8th June it caused heavy rains on the Arakan and Chittagong Coasts and carried the monsoon rains well into North-East India between the 10th and the 18th, and into East United Province by the 19th. This branch continued fairly active throughout the month over practically the whole of its field of activity except the United Provinces. The total rainfall during the month averaged over the plains of India was in defect by 5 per cent. Most of the Divisions were fairly well served but as already remarked Sind, Rajputana, Punjab, United Provinces and Madras returned heavy deficiencies respectively of 100, 66, 44, 38 and 28 per cent. for the month.

Conditions in July improved generally under the influence of three depressions rising off the Bay one after another in the first, third and last week of the month, which enable good rains to be gathered all along their tracks extending from south-west Bengal to Guzrat. And though both the branches of the current thus invigorated carried rains well into Central India, Guzrat, Rajputana, Sind and the United Provinces as also into East and North-East Punjab, they were unable to penetrate further and give relief to extreme North and North-West India. Averaged over the whole of India the total fall during July was 3 per cent. in excess. The notable excesses returned were 30 per cent. by Bihar and Orissa, 32 by Central India, and 24 by the Central Provinces; while the notable deficiencies were 74 per cent. in Sind, and 54 per cent. in North-West Frontier Province.

The month of August commenced with almost a complete break in the rains, which lasted almost to the middle of the month over North-West India and the central parts of the Continent, the activity of the monsoon for the time, being confined mainly to Burma, North-East India, and to the South of the Peninsula. The pulses gathered strength once again however about the 16th and carried the rains into the Central Provinces, laboriously working up to North-West India. A depression rising off the Bay about the 24th, which developed into a storm and traversed the Central Provinces and East Rajputana well into the Punjab, atonce stimulated both the branches of the current, and gave heavy rains not only over a wide area all along its track causing floods in parts of West Central India, Rajputana, and in the Punjab, but also strengthened the monsoon current generally over the Konkan and North Deccan. The total fall during the month was 11 per cent. in defect. Rajputana and Mysore were the only Divisions which returned excesses respectively of 24 and 22 per cent., while Sind, North-West Frontier Province, Punjab, United Provinces and Bihar and Orissa returned notable defects, respectively, of 80, 40, 50, 64 and 28 per cent.

In September much the same conditions prevailed. The stimulating effects of the storm late in August kept up the activity of the pulses for a while in the United Provinces and the Central Provinces, the monsoon generally being weak elsewhere. Indications of the retreat of the S.-W. Monsoon from the Punjab became apparent early in the month about the 2nd and from the United Provinces about the 5th, and the weather was practically dry thereafter in these regions. A depression rising off the North Madras Coast and the development of another shallow depression over Hyderabad about the middle of the month considerably affected the circulation, extending the monsoon to the North and Central Deccan, Guzrat and East Rajputana. During the last week, under the influence of yet another disturbance off the North Madras Coast, fairly active monsoon conditions prevailed in North-East India, and the North of the Peninsula. The total fall for the month was in defect by 25 per cent. The only Division returning excess was Hyderabad, the rest returned notable defects.

In October the activity of the retreating monsoon was confined mainly to the central parts and south of the Peninsula. Under the influence of a depression off the Bay on the 2nd, heavy rains were gathered in Orissa, North Madras, United Provinces and the central parts of the country and in northern Deccan. Good rains were also gathered about the middle of the month in the south of the Peninsula, associated with the usual change of conditions on the establishment of the North-East Monsoon. A storm off the Masulipatam Coast on the 20th together with another consequen-

tial disturbance developed off the Konkan Coast on the 23rd caused extensive rains throughout the Peninsula, Central India, and the United Provinces. The progress of this Arabian Sea disturbance northwards to Sind and the Kathiawar coast determined heavy fall all along the west coast and in Guzrat and Sind. The total fall for the month over the whole of India was 54 per cent. in excess.

The total fall for the season June to September averaged over the plains of India was 5 per cent. in defect.

The following table gives detailed information of the rainfall of the period June to September:—

Division.	Rainfall, June to September.			
	Actual.	Normal.	Departure from Normal.	Percentage departure from Normal.
	Inches.	Inches.	Inches.	
Burma	84.5	83.8	+ 0.7	+ 1
Assam	62.2	61.1	+ 1.1	+ 2
Bengal	64.0	60.9	+ 3.1	+ 5
Bihare and Orissa	44.2	45.5	— 1.3	— 3
United Provinces	21.6	36.1	— 14.5	— 40
Punjab	12.0	15.7	— 3.7	— 24
North-West Frontier Province	3.0	5.0	— 2.0	— 40
Sind	0.9	4.7	— 3.8	— 81
Rajputana	16.5	18.1	— 1.6	— 9
Bombay	40.5	36.9	+ 3.6	+ 10
Central India	31.1	33.8	— 2.7	— 8
Central Provinces	37.2	40.5	— 3.3	— 8
Hyderabad	31.1	26.7	+ 4.4	+ 16
Mysore	12.8	15.5	— 2.7	— 17
Madras	21.5	26.3	— 4.8	— 18
Mean of India	37.8	39.6	— 1.8	— 5

INTEREST TABLE.

From 5 to 12 per cent. on Rupees 100.

Calculated for 1 Year, 1 Month (Calendar), 1 Week, and 1 Day (365 Days to a Year), the Decimal Fraction of a Pie for the Day being shown for the Day.

Per cent.	*1 Day.*	*1 Week.*	*1 Month.*	*1 Year.*
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
5	0 0 2·630	0 1 6	0 6 8	5 0 0
6	0 0 3·156	0 1 10	0 8 0	6 0 0
7	0 0 3·682	0 2 1	0 9 4	7 0 0
8	0 0 4·208	0 2 5	0 10 8	8 0 0
9	0 0 4·734	0 2 9	0 12 0	9 0 0
10	0 0 5·260	0 3 0	0 13 4	10 0 0
11	0 0 5·786	0 3 4	0 14 8	11 0 0
12	0 0 6·312	0 3 8	1 0 0	12 0 0

To the student of Indian administration nothing is more remarkable than the manner in which great problems arise, produce a corresponding outburst of official activity to meet them and then fall into the background. This general truth is illustrated by a study of the history of famine in India. For nearly forty years it was the bogey of the Indian administrator. The forecasts of the rains were studied with acute anxiety. The actual progress of the rains was followed with no less anxiety, and at the first signs of a bad or poor season the famine relief machinery was furnished up and prepared for any emergency. The reason for this is clear if we examine for a brief space the economic condition of the Indian peasantry. Nearly three-quarters of the people are directly dependent on agriculture for their daily bread. Very much of this agriculture is dependent on the seasonal rains for its existence. Immense areas in the Bombay Presidency, Madras, the United Provinces and Central India are in a region of erratic and uncertain rainfall. The rainy season is short and if for any natural reason there is a weakness, or absence, of the rain-bearing currents, then there is either a poor harvest or no harvest at all. In Western lands everyone is acquainted with the difference between a good and a poor season, but western countries offer no parallel to India, where in an exceptionally bad year wide tracts of thickly populated land may not produce even a blade of grass. In the old days there were no railways to distribute the surplus of one part of India to the districts where the crop had failed. There were often no roads. The irrigation works were few and were themselves generally dependent on the rainfall for their reserves. The people lived from hand to mouth and had no store of food to fall back upon. Nor had they any credit. In the old days then they died. Commencing with the Orissa famine in 1865-67 the Government of India assumed responsibility for the saving of human life in such crises. After the famine of 1899-1900 this responsibility was also shouldered by the Indian States. Stage by stage this responsibility was expressed in the evolution of a remarkable system of famine relief covering the whole field. But now that machinery has reached a remarkable degree of perfection, it is rusting in the official armouries, because the conditions have changed. The whole of India is covered with a network of railways, which distributes the produce of the soil to the centres where food is required. The extension of irrigation has enormously increased the product of the soil and rendered large areas much less dependent on the monsoon rainfall. At the same time the scientific study of the problems of Indian agriculture has raised the capacity of even the "dry" zones. The peasantry has accumulated a certain reserve against the rainless days from the prosperity which accompanied the period of high prices. The rapid spread of the co-operative credit movement has mobilised and strengthened rural credit. The spread of manufacturing enterprise has lightened the pressure on the soil. The relation of famine to the question of Indian administration has therefore changed. In an exceptionally bad year it may create administrative difficulties: it has ceased to be an administrative and social problem.

Famine under Native Rule.

Famines were frequent under Native rule, and frightful when they came. "In 1630," says Sir William Hunter, in the History of British India, "a calamity fell upon Gujarat which enables us to realise the terrible meaning of the word famine in India under Native rule. Whole cities and districts were left bare of inhabitants." In 1631 a Dutch merchant reported that only eleven of the 260 families at Swally survived. He found the road thence to Surat covered with bodies decaying on the highway where they died, there being none to bury them. In Surat, that great and crowded city, he could hardly see any living persons; but "the corpses at the corner of the streets lie twenty together, nobody burying them. Thirty thousand had perished in the town alone. Pestilence followed famine." Further historical evidence was adduced by Sir Theodore Morrison in his volume on the Economic Transition of India. It has come to be seen that whilst railways have checked the old-fashioned practice of storing grain in the villages they have made the reserves, where they exist, available for the whole of India. In India there is now no such a thing as a food famine; the country always produces enough food for the whole of the population; famine when it comes is a money famine and the task of the State is confined to providing the means for those affected by drought to earn enough to buy food. The machinery whereby this is done will be examined after we have seen the experiences through which it was evolved.

History of Recent Famines.

The Orissa famine of 1865-67 may be taken as the starting point because that induced to first great and organised effort to combat distress through State agency. It affected 180,000 square miles and 47,500,000 people. The Bengal Government was a little slow in appreciating the need for action, but late food was poured into the district in prodigious quantities. Thirty-five million units were relieved (a unit is one person supported for one day) at a cost 95 lakhs. The mortality was very heavy, and it is estimated that a million people or one-third of the population, died in Orissa alone. This was followed by the Madras famine of 1866, and the famine in Western India of 1868-70. The latter famine introduced India to the great migration from Marwar which was such a distinguishing feature of the famine of 1899-1900; it is estimated that out of a total population of a million and a half in Marwar, one million emigrated. There was famine in Behar in 1873-74, then came the great South Indian Famine of 1876-78. This affected Madras, Mysore Hyderabad and Bombay for two years and in the second year extended to parts of the Central and United Provinces and to a small tract in the Punjab. The total area affected was 257,000 square miles and the population 58,500,000. Warned by the excessive expenditure in Behar and actuated by the desire to secure economy the Government relief programme was not entirely successful. The excess mortality in this famine is said to have been 5,250,000 in British territory alone. Throughout British India 700,000,000 units were relieved at a cost of Rs. 8½ crores. Charitable contributions from Great Britain and the Colonies aggregated Rs. 84 lakhs.

The Famine Codes.

The experiences of this famine showed the necessity of placing relief on an organised basis. The first great Famine Commission which sat under the presidency of Sir Richard Strachey, elaborated the Famine Codes, which amended to meet later experience, form the basis of the famine relief system to-day. They recommended (1) that employment should be given on the relief works to the able-bodied, at a wage sufficient for support, on the condition of performing a suitable task; and (2) that gratuitous relief should be given in their villages or in poor houses to those who are unable to work. They recommended that the food supply should be left to private agency, except where that was unequal to the demands upon it. They advised that the land-owning classes should be assisted by loans, and by general suspensions of revenue in proportion to the crop failure. In sending a Famine Code to the provincial governments, the Government of India laid down as the cardinal feature of their policy that the famine wage "is the lowest amount sufficient to maintain health under given circumstances. Whilst the duty of Government is to save life, it is not bound to maintain the labouring population at its normal level of comfort." Provincial codes were drawn up, and were tested by the famine of 1896-97. In that 307,000 square miles were affected, with a population of 69,500,000. The numbers relieved exceeded 4,000,000 at the time of greatest distress. The cost of famine relief was Rs. 7¼ crores, revenue was remitted to the extent of Rs. 1¼ crore, and loans given aggregating Rs. 1¾ crore. The charitable relief fund amounted to about Rs. 1¾ crore, of which Rs. 1¼ crore was subscribed in the United Kingdom. The actual famine mortality in British India was estimated at 750,000. The experiences of this famine were examined by a Commission under Sir James Lyall, which reported that the success attained in saving life and the relief of distress was greater than had ever been recorded in famines, comparable with it in severity, and that the expense was moderate. But before the Local Governments had been given time to digest the proposals of this Commission or the people to recover from the stock, the great famine of 1899-1900 supervened.

The Famine of 1899-1900.

This famine affected 475,000 square miles with a population of 59,500,000. In the Central Provinces, Berar, Bombay, Ajmer, and the Hissar district of the Punjab famine was acute: it was intense in Rajputana, Baroda, Central India, Hyderabad and Kathiawar. It was marked by several distinctive features. The rainfall over the whole of India was in extreme defect, being eleven inches below the mean. In several localities there was practically no rain. There was in consequence a great fodder famine, with a terrible mortality amongst the cattle. The water supply was deficient, and brought a crop of difficulties in its train. Then districts like Gujarat, where famine had been unknown for so many years that the locality was thought to be famine immune, were affected; the people here being softened by prosperity, clung to their villages, in the hope of saving their cattle, and came within the scope of the relief works when it was too late to save life. A very large area in the Indian States was affected, and the Marwaris swept from their impoverished land right through Central India like a horde of locusts, leaving desolation in their train. For these reasons relief had to be given on an unprecedented scale. At the end of July 4,500,000 persons were supported by the State, Rs. 10 crores were spent on relief, and the total cost was estimated at Rs. 15 crores. The famine was also marked by a widespread acceptance by Indian States of the duty hitherto shouldered by the Government of India alone—the supreme responsibility of saving human life. Aided by loans to the extent of Rs. 3½ crores, the Indian States did a great deal to bring their administration into line with that in British India. Although actual deaths from starvation were insignificant, the extensive outbreaks of cholera, and the devastating epidemic of malaria which followed the advent of the rains induced a famine mortality of approximately a million. The experiences of this famine were collated by the Commission presided over by Sir Antony MacDonnell. This Commission reported that taking the famine period as a whole the relief given was excessive, and laid down certain modified lines. The cardinal feature of their policy was moral strategy. Pointing out that if the people were assisted at the start they would help themselves, whilst if their condition were allowed to deteriorate it proceeded on a declining scale, they placed in the forefront of their programme the necessity of "putting heart into the people." The machinery suggested for this purpose was the prompt and liberal distribution of taccavi loans, the early suspension of revenue, and a policy of prudent boldness, starting from the preparation of a large and expansive plan of relief and secured by liberal preparations, constant vigilance, and a full enlistment of non-official help. The wage scale was revised; the minimum wage was abolished in the case of able-bodied workers; payments by results were recommended; and proposals were made for saving cattle.

The modern system.

The Government of India are now in possession of complete machinery to combat the effects of drought. In ordinary times Government is kept informed of the meteorological conditions and the state of the crops; programmes of suitable relief works are kept up to date, the country is mapped into relief circles, reserves of tools and plant are stocked. If the rains fail, policy is at once declared, non-officials are enlisted, revenue suspended and loans for agricultural purposes made. Test works are then opened, and if labour in considerable quantities is attracted, they are converted into relief works on Code principles. Poor houses are opened and gratuitous relief given to the infirm. On the advent of the rains the people are moved from the large works to small works near their villages, liberal advances are made to agriculturists for the purchase of plough, cattle and seed. When the principal autumn crop is ripe, the few remaining works are gradually closed and gratuitous relief ceases. All this time the medical staff is kept in readiness to deal with cholera

which so often accompanies famine, and malaria, which generally supervenes when the rains break.

Famine Protection.

Side by side with the perfection of the machinery for the relief of famine has gone the development of famine protection. The Famine Commission of 1880 stated that the best, and often the only means of securing protection from the extreme effects of famine and drought, are railways and irrigation. These are of two classes, productive and protective. Productive works being estimated to yield profits which will pay interest and sinking fund charges are met from loans; protective works, which do not pay, directly from revenue. In order to guarantee that there should be continuous progress with protective works, the Famine Insurance Grant was instituted in 1876. It was decided to set apart from the general revenues Rs. 1½ crores annually or one million sterling. The first charge on this grant is famine relief, the second protective works, the third the avoidance of debt. The chain of protective railways is now practically complete. Great progress is being made with protective irrigation. Acting on the advice of the Irrigation Commission an elaborate programme of protective irrigation works has been constructed, particularly in the Bombay Deccan—the most famine-susceptible district in India—and in the Central Provinces.

The Outlook.

Such in brief is the official programme and organisation which has been built up out of the experience and practice of the past. Yet everything goes to show that Government activity to save human life will never be wanted in the future on the colossal scale of former times, even so recently as 1899-1900. Each succeeding failure of the rains indicates that there has been in silent progress an economic revolution in India. In the year 1918 the rains failed more seriously and over a wider area than during any monsoon in the recent history of India. The deficiency in the rainfall was more marked than in the great famine of 1899. Yet such was the increased resisting power of the people that instead of a demand for State relief from over five millions, the maximum number at any time in receipt of public assistance was never so large as six hundred thousand. The shock to the social life of the community was insignificant; the effects of the drought completely disappeared with the good rains of the following year.

Increased Resisting Power.

The causes of this economic change in the conditions of India, whose influence is widespread are many. We can only briefly indicate them here. There is a much greater mobility in Indian labour. Formerly when the rains failed the ryot clung to his village until State relief in one form or another was brought almost to his doors. Now at the first sign of the failure of the rains he girds up his loans and goes in search of employmnet in one of the industrial centres, where the supply of labour is rarely equal to the demand, or on the constructional works which are always in progress either through State or private agency in the country. Then the ryot generally commands some store of value, often mistermed a hoard. The balance of exports in favour of India in normal times is approximately £50 millions a year. The gold and silver bullion in which this is largely liquidated is distributed all over the country, in small sums or in ornaments, which can be drawn upon in an emergency. The prodigious coining of rupees during the last two years of the war, and the continuous absorption of gold by India, represent small diffused savings, which take this form owing to the absence of banking institutions and lack of confidence in the banking system. There has been a large extension of irrigation. More than one-third of the land in the Punjab is now under irrigation, and in other Provinces, particularly in the famine-susceptible tracts of the Bombay Deccan, irrigation works have been constructed, which break the shock of a failure of the rains. Then the natural growth of the population has been reduced by plague and famine diseases, followed by the great influenza epidemic of 1918-19, which swept off five millions of people. This has not only prevented the increase of congestion, but has brought some areas particularly in the Indian States, below their former population-supporting capacity. The increase of railways distributes the resources of the country with ease; the spread of the co-operative credit movement has improved rural credit. Finally, there is the considerable development of manufacturing industry, which is generally short of labour and helps to absorb the surplus of a famine year. Whilst the Government is completely equipped with a famine code, there is no reason to suppose that there will ever recur such an emergency as that of 1899. Famine can now be efficiently met by the liberal distribution of tagavi, the suspension and remission of the land revenus demand, the relief of the aged and othere who cannot work, the provision of cheap foddee for the cattle, with possibly some assistance in transporting the affected population of the famine-affected tract to the industrial centres.

The increased resisting power of the people was effectively demonstrated during the famine of 1920-21, which was due to the failure of the monsoon towards the end of the year 1920. The distress which appeared in the end of 1920 persisted during the early months of 1921 and regular famine was declared in parts of Madras, Bombay, Central Provinces and Baluchistan. Local distress prevailed also in Bengal, Punjab and Central India. The largest number of persons on relief of all kinds did not exceed 0·45 million which was considerably less than 3% of the total population of the area affected by the failure of the monsoon.

The Indian Famine Trust.

Outside the Government programme there is always scope for private philanthropy, especially in the provision of clothes, help for the superior class poor who cannot accept Government aid, and in assisting in the rehabilitation of the cultivators when the rains break. At every great famine large sums have been subscribed, particularly in the United Kingdom, for this purpose, and in 1899-1900 the people of the United States gave generous help. With the idea of providing a permanent famine

The following statement shows the income and expenditure of the Trust during the past seventeen years the figures at the end of 1927 being the latest available for a complete year.

Year.	Income.	Expenditure. Madras.	Punjab.	Bombay.	Ajmere Merwara.	Bihar and Orissa.	United Provinces.	Bengal.	Central Provinces.	Total Expenditure.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1911	1,17,652	....	....	....	....	....	....	....	....	....
1912	(a) 1,45,537	....	....	1,36,000	....	....	....	....	....	1,36,000
1913	1,21,635	....	....	23,500	....	....	....	....	....	23,500
1914	1,22,695	....	....	....	....	....	1,00,000	....	..	1,00,000
1915	1,24,499	....	....	....	....	....	(c) —38,593	....	....	(c) —38,593
1916	1,29,206	....	....	....	....	....	(c) —3,305	25,000	....	21,695
1917	1,56,125	....	....	....	....	....	....	....	....	....
1918	1,26,962	....	....	....	....	....	....	....	....	....
1919	1,34,092	30,500	....	3,00,000	....	....	3,00,000	1,00,000	1,00,000	8,30,560
1920	1,16,917	....	....	....	....	50,000	(c) —21,480	....	....	28,520
1921	(b) 1,23,221	....	....	....	....	....	50,000	....	50,000	1,00,000
1922	1,19,825	25,000	....	....	....	....	....	....	....	25,000
1923	1,22,993	(c) —2,503	....	....	....	....	....	....	....	(c) —2,503
1924	1,33,518	1,50,000	45,000	....	....	....	....	....	....	1,95,000
1925	1,24,225	(c) —479	....	30,000	....	....	....	....	....	29,521
1926	1,28,600	....	....	....	11,000	....	....	....	....	11,000
1927	1,58,033	....	....	3,00,000 (c) —1,837	....	1,00,000	....	....	....	3,98,163
..	22,057	2,02,518	45,000	7,87,663	11,000	1,50,000	3,86,622	1,25,000	1,50,000	18,57,803

(a) Includes a bequest of Rs. 26,545.
(b) Includes Rs. 3,366 refunded from the grant made in 1900 for the maintenance of Rajputana Orphans.
(c) Represent refunds from grants made in previous years.

Sir Frederic Gauntlett, K.B.E., C.I.E., I.C.S., Auditor-General with the Government of India, has been Secretary and Treasurer of the Trust since 1912.

fund, the Maharaja of Jaipur gave in 1900 a sum of Rs. 15 lakhs, in Government securities to be held in trust for the purposes of charitable relief in seasons of general distress. This Trust has now swollen to over Rs. 36 lakhs.

This Trust in a few years became swollen to Rs. 28,10,000 and has ever since been maintained at that figure. The money is invested and the principal never taken for expenditure. The income from it is utilised for relief work as necessary and unexpended balances are temporarily invested, so as to make available in years of trouble savings when expenditure is not necessary. The temporary investments—in Government Securities—at the end of 1927 stood at Rs. 6,14,600 and the cash balance at the same time was Rs. 24,323-10-11, so that the total available for expenditure at the commencement of 1928 was Rs. 6,38,923-10-11. The returns for 1928 were not complete when this chapter was revised.

The whole conditions to meet which the Trust was founded have changed in recent years. This is the result of the improved policy of Government in regard to famine relief and of the difference in the meaning of the word famine in consequence of the improvement of transport communications and other factors affected by modern progress. An area stricken by failure of seasonal rains now obtains supplies from other regions in a manner impossible before the development of railways and of modern marketing practice and Government help its people by loans given direct or through Co-operative Societies to tide them over the period of scarcity. The experience of successive visitations of scarcity in different parts of the country also proves that the general economic progress of the people makes them able to meet temporary periods of stress in a manner formerly unimaginable. Famine in the old terrible sense of the term has in fact ceased to occur. This was well illustrated by the events of 1919, when the land suffered from a failure of the rains more general throughout India and worse in degree than any previously recorded by the Meteorological Department but the crisis was borne with a minimum of suffering. The demands upon the Famine Trust have consequently so greatly diminished in their original sense that hardly any money is now distributed from it for the relief of famine, in the proper sense of the word, resulting from rain failure and expenditure has mainly become grants of assistance to sufferer, from floods. The total expenditure upon real famine in the old sense has been less than Rs. 2½ lakhs since 1919. The terms of the Trust fortunately permit of management on lines according with modern needs.

BOY SCOUTS.

The Boy Scouts movement, initiated in England by Lt.-Gen. Sir Robert Baden Powell (the Chief Scout), has spread widely in India, both among Europeans and Indians. The Viceroy is Chief Scout of India and the heads of Provinces, are Chief Scouts in their own areas. The aim of the Association is to develop good citizenship among boys by forming their character—training them in habits of observation, obedience and self-reliance—inculcating loyalty and thoughtfulness for others—and teaching them services useful to the public and handicrafts useful to themselves.

It is confidently anticipated that in the Boy Scout Movement will be found a natural means of bridging the gulf between the different races existing in India. The movement is non-official, non-military, non-political and non-sectarian. Its attitude towards religion is to encourage every boy to follow the faith he professes. Every boy admitted as a Scout makes a threefold promise to do his best: (1) to be loyal to God and the King; (2) to help others at all times; and (3) to obey the Scout law. The law referred to lays down—

1. That a Scout's honour is to be trusted;
2. That he is loyal to God and the King, his parents, teachers, employers, his comrades, his country and those under him;
3. That he is to be useful and to help others;
4. That he is a friend to all and a brother to every other scout, no matter to what social class the other belongs;
5. That he is courteous;
6. That he is a friend to animals;
7. That he obeys orders;
8. That he smiles and whistles under all difficulties;
9. That he is thrifty;
10. That he is clean in thought, word, and deed.

INDIAN HEAD-QUARTERS.

Patron.—H. R. H. The Prince of Wales, K.G.

Chief Scout for India.—His Excellency Lord Irwin.

Chief Commissioner.—(Vacant.)

General Secretary.—George Cunningham Esq., C.I.E., O.B.E., I.C.S.

General Council for India—

Ex-officio.—The Chief Commissioner for India.
The Provincial Commissioners.
The Presidents of Provincial Councils.

Elected.—(Not completed.)

Nominated.—(Not completed.)

Provincial Commissioner for Bombay Presidency—Sir Chunilal Mehta, M.A., LL. B., K.C.S.I.,

Provincial Secretary for Bombay—M. V. Venkateswaran, Esq., M.A.

Scout Strength.

PROVINCE.	SCOUTS.	CUBS.	TOTAL
Assam	542	121	663
Baluchistan	80	31	111
Bangalore	184	21	205
Bengal	1,704	428	2,132
Behar and Orissa ..	1,232	137	1,369
Bombay	23,188*	4,281	27,469
Central India ..	28	6	44
Central Provinces ..	2,662	169	2,831
Delhi..	222	53	275
Madras	3,209	633	3,842
Punjab	2,107	114	2,221
Rajputana	179	71	250
United Provinces ..	1,949	158	2,107
Burma	2,063	366	2,429
Affiliated Associations—			
Cochin State Boy Scouts Association.	384	..	384
Marwar State Boy Scouts Association.	..	..	..

* Includes 428 Rovers.

Development.

yet electrified in Bombay and suburbs as by the B. B. & C. I. Railway's suburban service the G. I. P. Railway's electrified section thirty miles of Bombay and the needs of the B. E. S. & T. Company.

Nearly 100 miles southward of this Tata propose to erect two dams in the valley of the Koyna river, proposed by T. Arnall and developable on lines the two projects by Mr. Gibbs above partly to supply power to Bombay and develop a great assembly of electro-chemical industries near the power installation. The preliminary investigations for this scheme are proceeding. The catchment area for the lake 346 square miles and there will be a total after the rains of 112,600 million which will be sufficient to supply a load of 350,000 horse power for 8,000 per year. The preliminary estimates for a capital of Rs. 810 lakhs to carry scheme.

Mysore Installation.

The first hydro-electric scheme in India or, indeed, in the East, was River Cauvery, in Mysore State, inaugurated, with generating works mudram, in 1902. The Cauvery rises British district of Coorg, and flows Mysore. The first object with which lation was undertaken was the supply to the goldfields at Kolar. These are distant from Sivasamudram and for this was the longest electrical power sion line in the world. Current is also Bangalore, 59 miles away, where it is both industrial and lighting purposes.

The initial undertaking has constantly expanded since its inauguration, so total capacity, which was at first 6,000 power, is now approximately 25,000 is the maximum obtainable with which the Cauvery affords and, with the number of consumers and small, rapidly increasing, the of a completely new installation else be operated in parallel with or separate that at Sivasamudram, has been Two projects offer themselves. would involve the use of the River tributary of the Cauvery which has falls, and the second, known as the project, would have its power house Cauvery, 25 miles down-river from mudram and just within the borders State, adjacent to the Madras Presidency head of water available at Sivasamudram 400 feet, that on the Shimsha 618 which would generate 39,500 e. h. p. datu the Cauvery runs in rapids and a channel 20,000 feet long with a 22 would be necessary. There would generating units, each giving an 4,000 e. h. p. Future extensions additional 8,000 h. p. could be progressive spirit which has marked the ment of the works since their inception characterises the manner in which the of further extensions are being considered.

the seven great rivers eastward from the Indus stated to be capable of giving not less than three million horse-power for every thousand feet of fall from the Himalayas, while similar considerations apply to rivers in other parts. Some doubt is expressed as to the estimate of seven million horse-power in the Irrawaddy and Chindwin rivers, given in the Report of the London Conjoint Board of Scientific Studies.

The Report points out that the Bombay Presidency holds a unique position owing to its great existing and projected schemes at Lonavla, the Andhra Valley, the Nila Mula and the Koyna Valley and has the still greater advantage of possessing a firm ready to develop its resources.

Bombay Hydro-Electric Works.

The greatest water-power undertakings in India—and in some respects the greatest in the world—are the Tata hydro-electric schemes recently brought to fruition, and constantly undergoing expansion, for the supply of power in the city of Bombay. Bombay is after London the most populous city in the British Empire and it is the largest manufacturing town in Asia. Its cotton mills and other factories use over 100,000 horse power of mechanical energy and until a year or two ago this was almost entirely provided by steam, generated by coal coming from a distance—mostly Bengal. The Tata Hydro-Electric Power Scheme, now an accomplished fact, marked one of the big steps forward made by India in the history of its Industrial development. It was the product of the fertile brain of Mr. David Gostling, one of the well known characters of Bombay, nearly a generation ago. The exceptional position of the Western Ghats, which rise 2,000 feet from sea-level which a very short distance of the Arabian Sea, and force the monsoon as it sweeps to land, to break into torrential rain at the mountain passes was taken full advantage of, and the table lands behind the Ghats form a magnificent catchment area to conserve this heavy rainfall in. Mr. Gostling pressed the scheme on the attention of Mr. Jamsetji Tata for years, and with perseverance collected data which he laid before that pioneer of the larger Industries in India. He summoned the aid of experts from England to investigate the plan. The scheme was fully considered for six long years. Meanwhile both Mr. J. N. Tata and Mr. David Gostling passed away, but the sons of the former continued the work of their father and on Mr. Gostling's death, Mr. R. B. Joyner's aid was sought to work out the Hydraulic side of the undertaking.

The scheme completed, a syndicate secured the license from Government and an endeavour was made to enlist the support of financiers of England who tried to impose terms which were not acceptable. Meanwhile, the attention of Sir George Clarke (now Lord Sydenham), then Governor of Bombay, and an engineer of distinction himself, was drawn to the scheme. The interest shown by him drew the attention of Indian Chiefs in the Presidency of Bombay

and outside it to its possibilities, funds flowed in and a company with an initial capital of 1,75,00,000 Rupees was started.

The hydro-electric engineering works in connection with the project are situated at and about Lonavla above the Bhor Ghat. The rainfall is stored in three lakes at Lonavla, Walwhan and Shirawta, whence it is conveyed in masonry canals to the forebay or receiving reservoir. The power-house is at Khopoli, at the foot of the Ghats, whither the stored water is conveyed through pipes, the fall being one of 1,725 feet. In falling from this height the water develops a pressure of 750 lbs. per square inch and with this force drives the turbines or water wheels. The scheme was originally restricted to 30,000 electrical horse power, but the Company, in view of the increasing demand for power from the Bombay mills, decided to extend the works by building the Shirawta Dam and issued further shares bringing the capital to Rs. 3,00,00,000, the capacity of the scheme being increased to more than 40,000 electrical horse power. Issued Capital 7 per cent. Preference 8,735 shares fully paid and Ordinary 18,000, out of which 10,000 are fully paid and 8,000 new shares, on which Rs. 400 have been called up. There is also a Debenture Loan of Rs. 85 lakhs. The works were formally opened by H. E. the Governor of Bombay on the 8th February 1915. At present there are about 44 mills with motors of the aggregate B. H. P. of 55,000 H. P. in service. In addition to the cotton and flour mills which have contracted to take supply from the Company for a period of ten years, an agreement has been completed whereby the Tata Hydro-Electric Company, the Andhra Valley Power Supply Company and the Tata Power Company between them supply the whole of the electric power required by the Bombay Electric Supply and Tramways Company, Limited, and also the power for the electrification of the Harbour Branch and Bombay-Kalyan section of the G. I. P. Railway. There remain many prospective buyers of electrical energy and the completion of the Company's full scheme will not suffice for all such demands. Besides the Bombay cotton mills, which alone would require about 100,000 horse power, there are, for instance, tramways, with possibilities of suburban extensions. The probable future demand is roughly estimated at about 160,000 H. P. Recently the Company has embarked upon a considerable scheme of extensions, these involving the impounding of a fourth lake at Kundley, near Lonavla, the duplication of the pipe line and the installation of additional machinery at the power house at Khopoli.

Investigations undertaken by Mr. H. P. Gibbs, with a view to further developing the electrical supply led to the discovery of a highly promising water storage site in the valley of the Andhra River, situated near the present lakes previously overlooked, as altogether different treatment and design were required. In this instance the draw off point is 11 miles upstream from the dam and at a level 112 ft. above the lowest river bed level at the dam. The water is taken through a tunnel 8,700 ft. long driven in solid trap rock through the scarp of the ghauts of which the pressure pipes are an extension. Seventy feet of the upper water in the lake can be drawn off comprising 75 per cent. of the total amount of water stored, both above and below draw off level. A scheme was prepared to be carried out by a separate company and providing for holding up the Andhra River by a Dam, about a third of a mile long and 192 feet high, at Tokerwadi. This dam holds up a lake nearly twelve miles long, the further end of which approaches the brink of the Ghats at Khand. Here, a tunnel, a mile and a quarter long, carries the water to the surge chamber, whence it enters the pipes for a vertical drop of about 1,750 feet to the generating station at Bhivpuri, about 17 miles from the generating station at Khopoli. The scheme is designed to yield 100,000 horse power in its full development. A new company to operate the scheme was formed on the 31st August, 1916, with an initial capital of Rs. 2,10,00,000, divided into 160,000 Ordinary shares of Rs. 1,000 each and 5,000 Preference shares of Rs. 1,000 each, this being the Andhra Valley Power Supply Company, Limited. This Company will pay annually to the Tata Hydro-Electric Power Supply Company 15 per cent. upon the profits (after making certain deductions), or a sum of Rs. 50,000, whichever shall be the larger sum, the intention being that the new company shall pay annually to the Tata Hydro-Electric Power Supply Company a minimum sum of Rs. 50,000. Power is being supplied to some thirty factories in Bombay absorbing roughly 40,000 electrical horse-power, as well as to the Bombay Electric Supply and Tramways Company and to the G. I. P. Railway for the first stage of their electrification scheme.

Just as the Andhra project has been developed as a northward extension of the original scheme, so a southward development also originated by Mr. Gibbs and developable on lines similar to those of the Andhra project in now Practically Completed under the name of the Nilla-Mula scheme, the name arising from the fact that the valleys of the Nila and Mula rivers are being dammed for the conservation of water for it. A company entitled The Tata Power Co., Ltd., was floated in the autumn of 1919 for the purpose, having a capital of Rs. 9 crores, divided into 30,000 7½% cumulative preference shares of Rs. 1,000 each and 60,000 shares of Rs. 1,000 each, the first and present issue being of 10,000 preference shares and 35,000 ordinary shares. A lake having an area of sixteen square miles and a catchment area of 112 square miles has been formed at Mulshi by the erection of a masonry dam 4,100 feet in length and 158 feet in height. At the end of the lake opposite to the site of the dam, a tunnel has been cut through the Western Ghats to a total length of 14,500 feet, at the further end of which the water enters the pipe line and descends to the turbine power house at Bhira, 1,750 feet below. The head of water is sufficient to generate 150,000 electrical horse-power at 11,000 volts, and after being transformed up to 110,000 volts the current is transmitted to the receiving station at Dharavi, Bombay, through an overhead line approximately 80 miles in length. Five generating units each of 30,000 electrical horse-power are being erected, and of these two are already in commercial operation. The power will be absorbed by mills, factories and local area not

yet electrified in Bombay and suburbs as well as by the B. B. & C. I. Railway's suburban service, the G. I. P. Railway's electrified service within thirty miles of Bombay and the evergrowing needs of the B. E. S. & T. Company.

Nearly 100 miles southward of this Messrs. Tata propose to erect two dams in the huge valley of the Koyna river, proposed by Mr. A. T. Arnall and developable on lines similar to the two projects by Mr. Gibbs above mentioned, partly to supply power to Bombay and partly to develop a great assembly of electro-chemical industries near the power installation. The preliminary investigations for this scheme are still proceeding. The catchment area for the lake will be 346 square miles and there will be a total storage after the rains of 112,600 million cubic feet, which will be sufficient to supply a normal load of 350,000 horse power for 8,000 hours per year. The preliminary estimates provided for a capital of Rs. 810 lakhs to carry out the scheme.

Mysore Installation.

The first hydro-electric scheme undertaken in India or, indeed, in the East, was that on the River Cauvery, in Mysore State, which was inaugurated, with generating works at Sivasamudram, in 1902. The Cauvery rises in the British district of Coorg, and flows right across Mysore. The first object with which the installation was undertaken was the supply of power to the goldfields at Kolar. These are 92 miles distant from Sivasamudram and for a long time this was the longest electrical power transmission line in the world. Current is also sent to Bangalore, 59 miles away, where it is used for both industrial and lighting purposes.

The initial undertaking has constantly been expanded since its inauguration, so that its total capacity, which was at first 6,000 horse power, is now approximately 25,000 h.p. This is the maximum obtainable with the water which the Cauvery affords and, therefore, with the number of consumers, large and small, rapidly increasing, the necessity of a completely new installation elsewhere, to be operated in parallel with or separately from that at Sivasamudram, has been recognised. Two projects offer themselves. The first would involve the use of the River Shimsha, a tributary of the Cauvery which has natural falls, and the second, known as the Mekadatu project, would have its power house on the Cauvery, 25 miles down-river from Sivasamudram and just within the borders of Mysore State, adjacent to the Madras Presidency. The head of water available at Sivasamudram is 400 feet, that on the Shimsha 618 feet net, which would generate 39,500 e. h. p. At Mekadatu the Cauvery runs in rapids and a dam and a channel 20,000 feet long with a 22½ feet bed would be necessary. There would be three generating units, each giving an output of 4,000 e. h. p. Future extensions yielding an additional 8,000 h. p. could be made. The progressive spirit which has marked the management of the works since their inception now characterises the manner in which the problem of further extensions are being considered.

Works in Kashmir.

A scheme of much importance from its size, but more interesting because of the developments that may be expected from it than for the part which its current supply already plays in the life of the countryside, is one installed a few years ago by the Kashmir Durbar, utilising the River Jhelum, near Baramulla, which lies thirty-four miles north-west of Srinagar. The head works of the Jhelum power installation are situated six and a half miles from the power house and the main connection between the two is a great timber flume. These works and the forebay at the delivery end of the flume have a capacity for carrying water sufficient for the generation of 20,000 electrical horse power. Four pipes 600 feet long lead from the forebay to the power house, and from forebay to water-wheel there is an effective head of 395 feet. There are four vertical waterwheels, each coupled on the same shaft to a 1,000 k.w., 3-phase, 2,300 volt, 25-period generator running at 500 r.p.m., and each unit is capable of taking a 25 per cent. overload, which the generator end is guaranteed to maintain with safety for two hours. The power house is of sufficient capacity to allow of 15,000 k.w. generating plant being installed within it. Two transmission lines run side by side as far as Baramulla, 21 miles distant, at which point one terminates. The other continues to Srinagar, a further 34 miles. The installation at Baramulla was originally utilised for three floating dredgers and two floating derricks, for dredging the river and draining the swampy countryside and rendering it available for cultivation, but these operations have temporarily been curtailed, so that only one dredger is now in operation. The lighting of Baramulla has been taken in hand with satisfactory results and it is expected that the lighting demand will rapidly increase and that a small demand for power will soon spring up. At Srinagar, the line terminates at the State silk factory, where current is supplied not only for driving machinery and for lighting, but for heating. The greater part of Srinagar city is now electrically lighted and during the past year a motor load of over 100 k.w. has been connected with the mains, motors being hired out to consumers by the Electrical Department. This step was taken with a view to educating the people in the use of electric power and it has been entirely successful.

Recent Progress.

Apart from the development of the three projects in the Bombay Presidency the past four years have witnessed comparatively little progress in hydro-electric works. A small plant was completed and put into operation at Naini Tal during 1923, and the erection of another small plant was commenced at Shillong, but otherwise there is nothing to record. It is interesting to note, however, that preliminary investigations are proceeding with a view to the erection of hydro-electric plants in various parts of India. In the tea districts of Kalimpong and Kurseong, for example, it is proposed to harness a promising water-power site and to supply current to an important area in which are situated more than two hundred tea factories.

The Sutlej Hydro-Electric Project, at one time appeared to be one of the most promising propositions in the country, but owing to financial considerations it has now been indefinitely shelved. In Southern India a large number of sites have been investigated, and of these one on the Pykara river in the Nilgiris and another on the Kallar river on the borders of Travancore have been selected for development if and when the financial considerations can be satisfactorily settled. The Pykara river scheme is of some magnitude, and it is estimated that upwards of 50,000 horse-power will be available for electro-chemical industries which it is proposed to establish at Calicut on the West Coast. The Kallar river project is very much smaller, but it is interesting in being a scheme in which the Government of Madras and the Travancore Darbar will be jointly responsible, for the power house will be located on the British side of the river and the current transmitted to and distributed in Travancore State. Finally, there is a big combined project of hydro-electrification and irrigation in Hyderabad State. This scheme is still very much in the air, but the fact that it is under consideration is worthy of being placed on record in view of the somewhat unusual circumstance in India, that the tail water from the turbines will be made available for agricultural purposes and not allowed to run to waste.

The fact that the Bombay Electric Supply and Tramways Company has shut down its steam-driven generating plant and now takes its supply in bulk from the various Tata companies has been recorded above, and it is of more than passing interest to note that the Poona Electric Supply Company has put forward a similar proposition with effect from the time when power is available from the Tata Power Company's installation at Nila-Mula. This is a phase of hydro-electric distribution which is quite in its infancy in India, but it is possible to foresee the time when every village within a couple of hundred miles of a hydro-electric power station will receive its supply of electric current in bulk, thus greatly reducing capital and administrative charges and minimising the price of current to the consumer. It is a system which has become something of a fine art in California, where current is transmitted by overhead wires for many hundreds of miles at a pressure of 200,000 volts, or double the pressure commonly employed in India for overhead long-distance transmission.

Local Self-Government.

No field of the administration of India is likely to be more profoundly affected by the Reforms of 1919 than local government. This is one of the subjects transferred to Indian ministers, and there are many signs that the power will be freely used for the purpose of experiments in the direction of building up stronger and more vigorous local bodies. On the whole, the progress of local government in India for the past quarter of a century has been disappointing. The greatest successes have been won in the Presidency towns, and particularly by the Municipality of Bombay. The difficulties in the way of progress were manifest. Local government had to be a creation —the devolution of authority from the Government to the local body, and that to a people who for centuries had been accustomed to autocratic administration. Again, the powers entrusted to local bodies were insignificant and the financial support was small. There are however many indications that the dry bones of the mofussil are stirring; inasmuch as this being a transferred subject it is entirely provincial there will be the widest variation between province and province according to the special needs of each. We can indicate here only the broad tendencies, with the expression of opinion that this field will be one of the most important in the growth of nation-building forces in British India.

Throughout the greater part of India, the village constitutes the primary territorial unit of Government organisation, and from the villages are built up the larger administrative entitles—tahsils, sub-divisions, and districts.

"The typical Indian village has its central residential site, with an open space for a pond and a cattle stand. Stretching around this nucleus lie the village lands, consisting of a cultivated area and (very often) grounds for grazing and wood-cutting.... The inhabitants of such a village pass their life in the midst of these simple surroundings, welded together in a little community with its own organisation and government, which differ in character in the various types of villages, its body of detailed customary rules and its little staff of functionaries, artisans and traders. It should be noted, however, that in certain portions of India, *e.g.*, in the greater part of Assam, in Eastern Bengal, and on the west coast of the Madras Presidency, the village as here described does not exist, the people living in small collections of houses or in separate homesteads."—(*Gazetteer of India.*)

The villages above described fall under two main classes, *viz.*—

Types of Villages.—"(1) The 'severalty' or raiyatwari village, which is the prevalent form

outside Northern India. Here the revenue is assessed on individual cultivators. There is no joint responsibility among the villagers, though some of the non-cultivated lands may be set apart for a common purpose, such as grazing, and waste land may be brought under the plough only with the permission of the Revenue authorities, and on payment of assessment. The village government vests in a hereditary headman, known by an old vernacular name, such as *patel* or *reddi*, who is responsible for law and order, and for the collection of the Government revenue. He represents the primitive headship of the tribe or clan by which the village was originally settled."

"(2) The joint or landlord village, the type prevalent in the United Provinces, the Punjab and the Frontier Province. Here the revenue was formerly assessed on the village as a whole its incidence being distributed by the body of superior proprietors, and a certain amount of collective responsibility still, as a rule, remains. The village site is owned by the proprietary body, who allow residences to the tenantry, artisans, traders and others. The waste land is allotted to the village, and, if wanted for cultivation, is partitioned among the shareholders. The village government was originally by the *punchayet* or group of heads of superior families. In later times one or more headmen have been added to the organisation to represent the village in its dealings with the local authorities; but the artificial character of this appointment, as compared with that which obtains in a raiyatwari village is evidenced by the title of its holder, which is generally *lambardar*, a vernacular derivative from the English word 'number.' It is this type of village to which the well-known description in Sir H. Maine's *Village Communities* is alone applicable, and here the co-proprietors are in general a local oligarchy with the bulk of the village population as tenants of labourers under them."

Village Autonomy.—The Indian villages formerly possessed a large degree of local autonomy, since the native dynasties and their local representatives did not, as a rule, concern themselves with the individual cultivators, but regarded the village as a whole, or some large landholder as responsible for the payment of the Government revenues, and the maintenance of local order. This autonomy has now disappeared owing to the establishment of local, civil and criminal courts, the present revenue and police organisation, the increase of communications, the growth of individualism, and the operation of the individual *raiyatwari* system, which is extending even in the north of India. Nevertheless, the village remains the first unit of administration; the principal village functionaries—the headman, the accountant, and the village watchman—are largely utilised and paid by Government, and there is still a certain amount of common village feeling and interests.

Punchayets.—For some years there was an active propaganda in favour of reviving the village council-tribunal, or *Punchayet* and the Decentralisation Commission of 1908 made the following special recommendations:—

"While, therefore, we desire the development of a *punchayet* system, and consider that the objections urged thereto are far from insurmountable, we recognise that such a system can only be gradually and tentatively applied, and that it is impossible to suggest any uniform and definite method of procedure. We think that a commencement should be made by giving certain limited powers to *Punchayats* in those villages in which circumstances are most favourable by reason of homogeneity, natural intelligence, and freedom from internal feuds. These powers might be increased gradually as results warrant, and with success here, it will become easier to apply the system in other villages. Such a policy, which must be the work of many years will require great care and discretion, much patience, and judicious discrimination between the circumstances of different villages; and there is a considerable consensus of opinion that this new departure should be made under the special guidance of sympathetic officers."

This is, however, still mainly a question of future possibilities, and for present purposes it is unnecessary to refer at greater length to the subject of village self-government. Various measures have been passed, but it is too early to say what life they have. The Punjab Government has passed a Village Punchayat Act, which enables Government to establish in a village, a system of councillors to whom certain local matters, including judicial power, both civil and criminal of a minor character, may be assigned. In Bihar a Village Administration Act has been passed for the administration of village affairs by villagers themselves, including minor civil and criminal cases. Other Governments are taking steps in the same direction.

Municipalities.—The Presidency towns had some form of Municipal administration, first under Royal Charters and later under statute, from comparatively early times, but outside of them there was practically no attempt at municipal legislation before 1842. An Act passed in that year for Bengal, which was practically inoperative, was followed in 1850 by an Act applying to the whole of India. Under this Act and subsequent Provincial Acts a large number of municipalities was formed in all provinces. The Acts provided for the appointment of commissioners to manage municipal affairs, and authorised the levy of various taxes, but in most Provinces the commissioners were all nominated, and from the point of view of self-government, these Acts did not proceed far. It was not until after 1870 that much progress was made. Lord Mayo's Government, in their Resolution of that year introducing the system of provincial finance, referred to the necessity of taking further steps to bring local interest and supervision to bear on the management of funds devoted to education, sanitation, medical charity, and local public works. New Municipal Acts were passed for the various Provinces between 1871 and 1874, which, among other things, extended to the elective principle, but only in the Central Provinces was popular representation generally and successfully introduced. In 1881-2 Lord Ripon's Government issued orders which had the effect of greatly extending the principle of local self-government. Acts were passed in 1883-4 that greatly altered the constitution, powers, and functions of municipal bodies, a wide extension being given to the elective system, while independence and

responsibility were conferred on the committees of many towns by permtting them to elect a private citizen as chairman. Arrangements were made also to increase municipal resources and financial responsibility, some items of provincial revenue suited to and capable of development under local management being transferred, with a proportionate amount of provincial expenditure, for local objects. The general principles thus laid down have continued to govern the administration of municipalities down to the present day.

The Present Position.—There are some 757 Municipalities in British India, with something over 18 million people resident within their limits. Of these municipalities, roughly 687 have a population of less than 50,000 persons and the remainder a population of 50,000 and over. As compared with the total population of particular provinces, the proportion resident within municipal limits is largest in Bombay, where it amounts to 20 per cent., and is smallest in Assam where it amounts to only 2 per cent. In other provinces it varies from 4 to 9 per cent. of the total population. Turning to the composition of the Municipalities, considerably more than half of the total members are elected and there is a steady tendency to increase this proportion. Ex-officio members are only 7 per cent. and nominated 25 per cent. Elected members are almost everywhere in a majority. Taking all municipalities together, the non-officials outnumber the officials by nearly six to one. The functions of municipalities are classed under the heads of Public Safety, Health, Convenience and Instruction. For the discharge of these responsibilities, there is a municipal income of Rs. 14·03 crores derived principally from taxation, just over one-third coming from municipal property, contributions from provincial revenues and miscellaneous sources. Generally speaking, the income of municipalities is small, the four cities of Calcutta, Bombay, Madras and Rangoon together providing nearly 40 per cent. of the total. The heaviest items of this expenditure come under the heads of "Conservancy" and "Public Works" which amount to 15 per cent. and 14 per cent. respectively, "Water-supply" comes to 13 per cent., "Drainage" to 6 per cent. and "Education" to no more than 8 per cent. In some localities the expenditure on education is considerably in excess of the average. In the Bombay Presidency, excluding Bombay City, for example, the expenditure on education amounts to more than 21 per cent. of the total funds, while in the Central Provinces and Berar is is over 17 per cent.

District Boards.—The duties and functions assigned to the municipalities in urban areas are in rural areas entrusted to district and local Boards. In almost every district of British India save in the province of Assam, there is a board subordinate to which are two or more sub-district boards; while in Bengal, Madras and Bihar and Orissa, there are also Union Committees. Throughout India at large there are some 221 district boards with 556 sub-district boards and more than 800 Union Committees. This machinery has jurisdiction over a population which was some 213 millions in 1919-20. Leaving aside the Union Committees the members of the Boards numbered a little over 14,000 in 1922-23, of whom 62 per cent. were elected. As in the case of municipalities the tendency has been throughout India to increase the elected members at the expense of the nominated and the official members. The Boards are practically manned by Indians, who constitute 96 per cent. of the whole membership. Only 11 per cent of the total members of all boards are officials of any kind. The total income of the Boards in 1922 amounted to Rs. 11·32 crores, the average income of each district board being Rs. 5,00,000. The most important item of revenue is provincial rates, which represent a proportion of the total income varying from 25 per cent. in Bombay and in the N. W. F. Province to 63 per cent. in Bihar and Orissa. The principal objects of expenditure are education which has come remarkably to the front within the last three years and civil works such as roads and bridges. Medical relief is also sharing with education though in a less degree the Lion's share of the available revenue.

Improvement Trusts.—A notable feature in the recent sanitary history of India is the activity played by the great cities in the direction of social improvements. In Bombay and Calcutta the Improvement Trusts are continuing their activities which are described in a separate chapter (q.v.). In Bombay the work of the Improvement Trust is being developed by the Bombay Development Directorate. Other cities are beginning to follow the examples of these great cities and Improvement Trusts have been constituted in Cawnpore, Lucknow and Allahabad in the United Provinces and in several of the larger cities of the Provinces of India. Their activities have, however, been severely curtailed by the financial stress.

Provincial Progress.—There was passed in *Bengal* in 1919 a Village Self-Government Act embodying the policy of constituting Union Boards at the earliest possible date for groups of villages throughout the province. The number of these boards continues to increase, rising from 1,500 to more than 2,000. Though they are in their infancy as yet, many of them show a remarkable aptitude for managing their wn affairs.

In *Bombay* the development of village self-government is also proceeding, as the result of an Act for constituting, or increasing the power of village committees, which was passed in 1920 by the Legislative Council. In this presidency, some 75 out of 157 municipalities had a two-thirds elected majority of councillors in the year 1920; and a distinct step forward has been projected by the administration in the direction of liberalizing the constitution of all municipal bodies. The policy of appointing a non-official president has been extended both to district and sub-district boards, and a large number of non-officials have also been appointed presidents of sub-districts (taluka) boards. In *Madras* also the institutions of local self-government continued to progress in an encouraging manner. The number of district boards in the Presidency was 24, with 882 members. The number of sub-district boards rose from 119 to 121. The total number of Municipal Councils rose from 73 to 80 and the proportion of Indian

to European and Anglo-Indian members further increased. In 1920-21 there were 54 municipal councils, consisting entirely of Indian members, as against 41 in the previous year. The average imposition of taxation per head of population is still very low, being only about Rs. 2. Nonetheless, 28 towns in the presidency possess a protected water-supply and water works schemes are either under execution or in contemplation in a number of others. The number of educational institutions maintained by municipal councils rose to 1,016 which was 99 more than in the previous year; while the net educational charges amounted to Rs. 12·61 lakhs.

In the *United Provinces* the new District Boards, which consist of non-official members only, with elected non-official Chairmen, were plunged straight-way into financial difficulties. In some cases the necessity for retrenchment was immediate resulting in the curtailment of medical relief and of allotments for the ordinary repairs of roads. Additional taxation has so far not been generally imposed and the Boards are still suffering from inexperience in husbanding public money and obtaining the full value for their expenditure. In the case of Municipal Finances, there has been some change for the better. The new Municipalities have shown a great interest in all forms of civic activity but they are still hampered in their work by political and communal obsessions. They are reluctant to impose new taxation but a considerable programme of expenditure lies before them. The restoration of municipal roads, the abatement of the dust nuisance and the renewal of water-works plant are problems calling almost everywhere for immediate solution. On the whole, the position is more hopeful since the rapid progress which was being made towards Municipal insolvency has been arrested.

In the *Punjab* municipal administration continued to show improvement, the general attitude of the members in regard to their responsibilities being promising for progress in the future. Generally speaking the finances are in a more satisfactory position than was the case in previous years. Expenditure on water-supply schemes is steadily increasing and the capital cost of schemes executed during 1924-25 amounted to over Rs. 21 lakhs as compared with Rs. 11 lakhs in the previous year.

Three Acts of considerable importance, providing for the creation of improvement trusts, for the more effective administration of smaller towns and for the establishment of village panchayats have been passed. Further, Municipalities and District Boards have been reconstituted in a more democratic form.

In the *Central Provinces*, the year 1920 witnessed the passing of a Local Self-Government Act which will guide into proper channels the undoubtedly growing interest in public matters. The continued reduction of official members and chairman, and the wider powers of control given to local bodies will be an incentive to the development of local self-government, leading to an increased sense of public duty and responsibility. Another very important measure regulating municipalities was passed into law in 1922. Its chief features are the extension of the Municipal franchise, the reduction of official and nominated members, the extension of the powers of Municipal Committees and the relaxation of official control.

In the *North-West Frontier Province*, the institution of local self-government is somewhat of a foreign growth. Certain of the municipal committees are still lax in the discharge of the responsibilities, and meetings are reported to be infrequent, but the attendance of non-official members is gradually increasing. Concerning Municipal administration the Local Government reports that the members continue to take a very great interest in their duties and that their attitude towards the responsibilities imposed upon them is on the whole satisfactory. Communal feeling shows itself in certain localities; but is in many instances off-set by the public spirit and initiative of individual members and there are considerable symptoms of advance in independence of action and in the smooth working of the Committees.

Local Government Statistics.

Municipalities.—With this general introduction we can now turn to the statistical results of the working of Local Self-Government. The following table gives information as to the constitution of municipal committees, taxation, &c., in the chief provinces in 1926-27:—

Province.	Population within Municipal Limits.	Number of Munici-palities.	Number of Members of Com-mittees.	Classification of Members.		Income.	Incidents per Head of Population.		Expenditure.
				Official.	Non-Official.		Rates and Taxes.	Total Income (excluding Extraordinary and Debt.)	
Presidency Towns.						Rs.	Rs. a. p.	Rs. a. p.	Rs.
Calcutta	1,077,264	1	90	1	89	2,63,14,432	16 5 1	19 14 1	2,95,44,804
Bombay City	1,175,914	1	106	3	103	20,49,07,617	24 0 5	27 6 7	20,51,33,911
Madras City	528,791	1	48	1	47	83,13,410	7 2 5	10 9 6	90,04,872
Rangoon	335,491	1	34	2	32	1,47,34,089	17 11 0	25 9 4	1,20,34,645
District Municipalities.									
Bengal (excluding Calcutta).. ..	2,016,867	115	1,638	139	1,499	94,29,543	3 3 9	4 5 4	96,50,331
Bihar and Orissa	1,258,038	61	1,023	157	866	40,85,795	2 0 9	2 14 2	39,44,604
Assam	166,909	25	295	11	284	10,58,800	3 11 2	6 3 9	10,24,358
Bombay (excluding Bombay City)..	2,678,542	156	3,095	211	2,884	3,39,[illegible]7,058	5 9 16	8 12 10	3,43,62,945
Madras (excluding Madras City) ..	2,501,948	80	1,702	10	1,692	2,00,28,737	2 6 4	5 9 1	1,90,00,416
United Provinces	2,920,865	85	1,127	26	1,101	1,79,87,581	3 8 8	5 4 0	1,76,87,907
Punjab	1,827,690	105	1,202	128	1,074	1,48,58,567	4 4 4	7 10 10	1,53,65,924
N. W. Frontier Province	159,469	6	120	32	88	16,62,882	5 8 8	10 1 3	19,83,702
Central Provinces and Berar.. ..	1,048,299	65	1,084	64	1,020	76,91,928	2 14 11	5 13 6	79,32,881
Burma (excluding Rangoon).. ..	814,132	57	807	74	733	81,16,773	3 14 2	9 2 6	70,43,737
British Baluchistan	28,238	1	31	5	26	5,85,659	14 1 9	18 10 11	5,76,872
Ajmer-Merwara	145,048	4	60	9	51	6,80,344	2 9 7	3 13 7	6,83,578
Coorg	12,076	5	60	19	41	47,442	2 9 3	3 14 8	44,440
Delhi	248,302	1	36	2	34	25,85,606	5 6 1	8 13 1	26,01,186
Bangalore	118,940	1	28	8	20	11,61,836	5 1 9	8 10 5	12,09,053
Total 1926-27 ..	19,062,813	771	12,586	902	11,684	37,81,78,099	6 2 1	8 13 3	37,88,31,066

Calcutta Improvement Trust.

The Calcutta Improvement Trust was instituted by Government in January, 1912, with a view to making provision for the improvement and expansion of Calcutta by opening up congested areas, laying out or altering streets, providing open spaces for purposes of ventilation or recreation, demolishing or constructing buildings and re-housing the poorer and working classes displaced by the execution of improvement schemes.

The origin of the Calcutta Improvement Trust must, as in the case of the corresponding Bombay body, upon which the Calcutta Trust was to a large extent modelled, be looked for in a medical enquiry which was instituted into the sanitary condition of the town in 1896, owing to the outbreak of plague. It was estimated that the Trust might in the ensuing 30 years have to provide for the housing of 225,000 persons. The population of Calcutta proper, which includes all the most crowded areas, was 649,995 in 1891, and increased to 801,251, or by 25 per cent., by 1901. The corresponding figure according to the 1911 Census was 896,067 and this had increased by 1921 to 993,508.

The problem of expansion was difficult, because of the peculiar situation of Calcutta, which is shut in on one side by the Hooghly and on the other by the Salt Lakes.

Preliminary investigations continued for several years, so that it was only in 1910 that legislation was eventually introduced in the provincial legislature and the Trust instituted by it. The Bill provided for a large expenditure on improvement schemes and the provision of open spaces and for special local taxation to this end. The total capital expenditure up to 31st March 1928 amounted to nearly ten and a quarter crore. It also provided for the appointment of a wholetime chairman of the Board of Trustees and the membership of the Trust was fixed at eleven.

The following constituted the Board of Trustees at 31st March 1928:—Mr. J. A. L. Swan, C.I.E., I.C.S., Chairman; Mr. J. C. Mukherjea, Bar-at-Law, Chief Executive Officer, Calcutta Corporation *(ex-officio)*; Vacant, to be elected by the Corporation of Calcutta under Section 7 (1) (*a*) of the Calcutta Improvement Act, 1911; Mr. Prabhudoyal Himatsingha, elected by the elected councillors, Corporation of Calcutta, under Section 7 (1) (*b*) of the Calcutta Improvement Act, 1911, as modified by the Amendment Act of 1926; Mr. Charu Chandra Biswas, elected by Councillors other than elected Councillors of the Corporation of Calcutta, under Section 7 (1) (*c*) of the Calcutta Improvement Act, 1911, as modified by the Amendment Act of 1926; Mr. G. Morgan, C.I.E., elected by the Bengal Chamber of Commerce; Babu Hari Sankar Paul, elected by the Bengal Chamber of Commerce; Mr. H. Sudlow; F.R.I.B.A., Mr. L. S. Bingemann, I.C.S. Rai Badridas Goenka Bahadur, ; Lt. Bejoy Prosad Singh Roy, appointed by the Local Government.

During the 16 years that it has now been at work, the Trust have decided, and partly or entirely carried through, several improvement schemes for opening up congested areas, laying out or widening streets and providing open spaces.

In Central Calcutta many highly insanitary *bustees* have been done away with and several roads of an improved type laid out, the most important of which is the Central Avenue, 100 ft. wide, which at present extends from Beadon Street to Chowringhee, and will shortly be extended to Shambazar on the north.

In the north of the City, a park and play ground have been completed and several wide roads driven through that highly congested area. The approaches to the City have also been adequately widened.

The Suburban Areas to the South and South-East of Calcutta required greater attention and extensive development schemes were undertaken. Several open spaces and squares have been made in various parts. Insanitary tanks requiring approximately 2 crores C.ft. of earth have been filled up. Russa Road which forms the southern approach to the town has been widened to 150 ft. for a length of one mile and 100 ft. for a length of another mile. It now gives a most pleasant drive from Chowringhee to Tollygunge. To improve the drainage of this area a 100 ft. wide East to West road, from Ballygunge Railway Station to Chetla Bridge, and for recreation an artificial lake of 167 bighas with adequate grounds are being made.

Lastly, for the housing of the displaced population the Trust has undertaken on a large scale the following schemes:—

In the early stages three blocks of chawls were built in Wards Institution Street for persons of the poorer classes. It was found, however, that the persons displaced preferred to take their compensation and migrate to some place where they could erect *bastis* of their own, the class of structures they were accustomed to live in. These chawls were then filled with persons of limited means, *e.g.*, School Masters, poor Students, Clerks and persons of the artisan class. As many as 1,200 people are housed in these chawls, these buildings, including land, cost Rs. 2,44,368 and are let at very low rents—ground floor rooms at Rs. 5 per mensem and top floor rooms on Rs. 6 per mensem, each room measuring 12'×12' with a 4 ft. verandah in front opening on to a central passage 7 ft. wide.

As these chawls failed to attract the people for whom they were meant, the Board next tried an experiment in providing sites for bustees. Two sites with a lettable area of 16 bighas were acquired within the area of Maniktola Municipality, but they failed to attract because they were out of the way and were expensive.

KERBALA TANK LANE RE-HOUSING SCHEME.—In this scheme 4 detached and 35 semi-detached houses were built. The detached houses were sold last year as this scheme never became popular with the class of tenants for whom they were originally intended. Owing to this unpopularity the Board further decided to throw open to tenants of all classes 18 out of the remaining 35 semi-detached houses. This change of policy, however, produced no effect on the letting.

Owing to want of suitable tenants the entire dwellings in Kerbala Tank Re-housing scheme had been sold by private sale shortly after the 31st March 1927.

BOW STREET RE-HOUSING SCHEME.—Seven blocks of buildings containing one-roomed, two-roomed and three-roomed suits have been constructed to re-house Eurasians and Anglo-Indians displaced by the operations of the Trust. This scheme has proved a striking success.

PAIKPARA RE-HOUSING SCHEME.—This scheme has an area of 36 bighas well laid out in 96 building sites. Special facilities are offered to dishoused persons for securing land in this scheme.

BOMBAY IMPROVEMENT TRUST.

The transfer of the Trust to the Municipality has now been effected by an Act of Legislature called "The City of Bombay Improvement Trust Transfer Act, 1925 (Bombay Act No. XVI of 1925). By virtue of this Act the powers and duties of the Trustees for the Improvement of the City of Bombay have been transferred and the property and rights belonging to the said Trustees have now been vested in the Municipal Corporation for the City of Bombay which is referred to as the Board, the President of the Corporation being also the President of the Board.

The execution of the powers and the performance of the duties vested in the Board is entrusted to a committee called the "Improvements Committee" subject to the general control of the Board. The Improvements Committee consists of eighteen members, that is to say, fourteen elected members and four nominated members. Of the elected members eleven are elected by the Board, one by the Bombay Chamber of Commerce, one by Indian Merchants' Chamber and one by the Millowners' Association out of their own bodies respectively. The nominated members are appointed by Government by notification, three of them being chosen from among the following:—

(*i*) The Director of Development, Bombay,

(*ii*) the Chairman of the Bombay Port Trust,

(*iii*) the Collector of Bombay, and

(*iv*) the Executive Engineer, Presidency District,

and the fourth by Government to represent labour from among the members of the Board.

The Municipal Commissioner has the right of being present at a meeting of the Committee and of taking part in the discussions thereat. but he shall not vote upon or make any proposition at the meeting. The Chief Officer, who is the Chief Executive Officer, is appointed by the Board subject to confirmation of Government. He has the same right of being present at a meeting of the Board and of the Committee and of taking part in the discussions thereat as a member of the said Board or Committee, but he must not vote upon or make any proposition at such meeting. He exercises general supervision and control over the acts and proceedings of all officers and servants of the Board in matters of executive administration and is directly responsible to the Board.

The specific duties of the Trust are to construct new and widen old streets, open out crowded localities, construct sanitary dwellings including those required for the Bombay City Police. The Trust derives its income from certain Government and Municipal lands vested in the Trust and the schemes it has undertaken. The Trust receives a contribution from Municipal revenues amounting to a definite share in the general tax receipts—approximating to 2 per cent. on assessments and subject to no maximum. Works are financed out of loans raised by the Board. By the close of 1925-26 the Board had raised Rs. 15,24 lakhs by loans and their total capital receipts (including grants of Rs. 54 lakhs received from Government) amounted to Rs. 18,23 lakhs out of which they had spent Rs. 113 lakhs on the improvement of Government and Municipal lands temporarily vested in the Trust and Rs. 15,92 lakhs on their acquired states and office buildings. The Trust have provided in their chawls accommodation for 37,000 persons.

The present Chairman and members of the Improvements Committee are as follows:—

(*a*) *Elected by the Board*:—

Mr. Hoosenally M. Rahimtoola, B.A., M.L.C., *Chairman*.

Mr. R. D. Bell, C.I.E., I.C.S.

Mr. W. Dillon, I.C.S.

Mr. G. K. Borade.

Mr. B. G. Horniman

Mr. N. G. Hunt.

Mr. K. F. Nariman, B.A., LL.B.

Mr. L. R. Tairsee.

Mr. Manu Subedar.

Mr. Mirza Ali Mohammed Khan, M.A., LL.B.

Mr. B. G. Parelkar.

The Hon'ble Sir Phiroze C. Sethna, Kt., O.B.E.

Mr. S. L. Silam, B.A., LL.B.

Mr. W. H. Neilson, O.B.E.

Mr. H. P. Mody M.A., LL.B.

Sir Vasantrao A. Dabholkar, Kt., C.B.E., M.L.C.

Dr. Accacio G. Viegas, L.M. & S.

Mr. Y. G. Pandit.

Municipal Commissioner—Mr. A. R. Dalal, I.C.S.

Chief Officer—Mr. R. H. A. Delves, F.S.I.

Secretary—Cawasjee Pestonjee Gorwalla, B.A.

Chief Accountant—Narayen T. Chawathey.

Engineer.—Mr. T. R. S. Kynnersley, A.M. I.C.E.

Trust Architect.—Mr. M. Framjee, L.C.E., L.R. I.B.A.

Land Manager.—Mr. M. S. Bharucha, L.C.E.

Estate Agent.—A. K. Dadachanji, L.C.E.

Bombay Development Scheme.

The Bombay Development Scheme in its widest sense represents concerted attempts by the three local bodies, the Municipality, the City Improvement Trust and the Port Trust, each working in its own sphere, and by the Government, to secure the rapid and adequate development of the city and suburbs of Bombay.

The Municipality is developing various areas in the city which will result in providing increased residential and business accommodation. The Mahim scheme will provide main avenue running north to south, in addition to the 60 feet road from Worli to Mahim Bazar and a large number of cross roads. It aims at the development of an area in which it may be possible to house, approximately, a population of 250,000. Provision has been made for a central park with a frontage on the bay and for a smaller park near the southern end of the area. The main contribution of the Municipality, however, towards the general development scheme lies in the great water and drainage projects which it is undertaking and which are essential for the health and well-being of the city.

Improvement Trust.—The Improvement Trust are developing the north of the Island on a large scale completing their old schemes, Dadar-Matunga and Sion-Matunga, and carrying on with the new schemes adopted in 1919, the total area of which amounts to about one-ninth of the area of the whole Island. Of the latter, the Worli scheme will provide for three classes of people, the richer class on the sea face, the middle class on the main road and a large area for the working classes on land reclaimed in the neighbourhood of the mills. At Dharavi the scheme for removing the tanneries and filling in the swamps to the south is in abeyance. The Sewri-Wadalla scheme is intended almost entirely for the working and lower middle classes, and the area included in it will, when the contemplated railway connections are made, be within easy access by rail from Victoria Terminus.

Port Trust.—The construction of the new cotton depot on the Mazgaon-Sewri reclamation has been completed and has released for other purposes the ground now occupied by the Cotton Green.

Government Programme.—The works for which Government are directly responsible are as follows :—

(*a*) The Industrial Housing Scheme providing one-room tenements for the working classes, to meet an actual existing shortage of accommodation as reported by the Municipal Commissioner in 1919.

(*b*) The Back Bay Reclamation, to reduce congestion in the business area and provide residential accommodation and open spaces in the south of the City.

(*c*) The development of South Salsette, including Trombay, partly for residential and partly for industrial purposes.

(*d*) The provision of other industrial areas at greater distances.

(*e*) The improvement of communications to the suburban areas.

The question of special measures for the development of Bombay was under the consideration of Government for many years. The results of the last general survey of the subject are contained in the report of the Bombay Development Committee submitted in May 1914. The war made it impossible then to carry out any large schemes. When the war had come to an end, it was found that owing to the large increase in the City's population during the war, and the high prices of the materials conditions were much worse than before, and that more rapid action was necessary.

Scope of Work.—In a speech to the Legislative Council in August 1920, His Excellency the Governor (then Sir George Lloyd) explained that the industrial housing scheme, which Government considered essential, would be carried out by them direct, instead of being entrusted to the Municipality or the Improvement Trust, because of the very heavy liabilities which already rested on those bodies. He introduced a Bill for the levy of a cess of one rupee per bale on cotton imported into Bombay, the proceeds of which would be used partly to provide additional revenue for the Municipality in view of its large programme of expenditure, partly to meet the loss anticipated on the housing scheme, and partly to assist development schemes in Salsette.

He announced Government's decision to establish a new Development Department and Directorate which as was at once a Department of Government and an executive organisation and was constituted a few months later. Some of the programme of work of the Department has since been completed but the greater part of it has been suspended for the present owing to depression in the land market, while the construction of more chawls has been held in abeyance owing to the decrease in population since the census of 1921. The Development Directorate was, therefore, abolished in January 1927 and the executive organisation reduced and reorganised. There is still a special branch of the Government Secretariat, *viz.*, the Development Department which deals with development operations.

Personnel.—The whole Development Department is in charge of the Honourable Sir GHULAM HUSAIN HIDAYATULLAH, KT., B.A., LL.B., J.P.

The Back Bay Reclamation Scheme is in charge of a Chief Engineer assisted by two Deputy Chief Engineers, one for the Dredging Section and the other for the Marine Lines, Colaba and Quarry Section.

The technical control over all works, other than the Back Bay Scheme, was transferred to the Public Works Department, towards the end of the year 1926.

The Government of India have appointed a special Audit and Accounts Officer for the Bombay Development Scheme, and have authorised his appointment as Deputy Financial Adviser under the Finance Department.

R. D. BELL, C.I.E., I.C.S., Secretary to Government, Development Department, and Commissioner, Bombay Suburban Division, (also holds the appointment of Land Manager).

H. St. C. Smith, J.P., Deputy Secretary to Government, Development Department, and Assistant Commissioner, Bombay Suburban Division.

R. B. Vachha, M.A., J.P., Assistant Secretary to Government, Development Department.

K. S. Framji, C.I.E., B.A., L.C.E., F.U.B.: Chief Engineer, Back Bay Reclamation Scheme.

E. M. Duggan, B.Sc., A.M. Inst. C.E., Deputy Chief Engineer, Reclamation Branch, Marine Lines, Colaba and Quarry Section.

C. R. Brims, Deputy Chief Engineer, Reclamation Branch, Dredging Section.

G. D. Kundaji, M.R. San. I. (Lond.), A.M.I.E. E.S. (Glas.), Marine Surveyor.

K. R. Doctor, F.S.I., L.C.E., A.M.I.E., Personal Assistant to the Land Manager, Development Department. (Also Assistant Development Officer, Kurla and Trombay areas, and Special Assistant to the Collector, Bombay Suburban District.)

S. M. Bharucha, B.A., Collector, Bombay Suburban District, and Salsette Development Officer. (Also Superintendent, Bombay Suburban Survey).

Land Acquisition.

G. C. Rowe, F.S.I., F.I. Arb., J.P., Land Acquisition Officer for the City of Bombay.

Audit and Finance.

The duties of the Financial Adviser are now carried out by the Secretary to Government, Finance Department.

S. M. L. Bean, Deputy Financial Adviser to Government, Development Department, and Audit and Accounts Officer, Bombay Development Scheme.

Military Lands Scheme.

S. M. L. Bean, Secretary, Board of Control.

I. C. Dare, B.A., F.R.S.A., F.S.I., A.M.I.E., M.I.S.E., Executive Engineer.

Back Bay Reclamation Scheme.—Having regard to the recommendations made by the Mears' Committee in January 1927 and in accordance with the wishes of the Legislative Council Government have decided for the present to confine future operations in connection with the Back Bay Reclamation Scheme to the reclamation of two blocks (Nos. 1 and 2) at the northern end of the area and of two blocks (Nos. 7 and 8) at the southern or Colaba end, with a marine drive along the existing foreshore connecting blocks Nos. 2 and 7. The area under reclamation has thus been reduced from 1,145 to 552 acres. A representative committee has also been constituted with a view to advise Government on all important matters connected with the reclamation. A layout plan in respect of the blocks which are proposed to be reclaimed has been prepared and is now before another committee specially appointed for the purpose. A revised detailed estimate in respect of the reduced scheme is also under preparation. Dredging into blocks Nos. 1, 7 and 8 is complete. Dredging into block No. 2 will be carried out during the dredging season of 1928-29, and thereafter all dredging operations will cease.

All the four blocks require to be topped with murum before they can be developed or otherwise utilised. The work of murum topping on block No. 8 has been given on contract and is expected to be complete by June 1929 when the blocks will be transferred in an undeveloped condition to the military authorities. An area of 24 acres in this block has already been transferred in 1927 for use as a military recreation ground. After the completion of block No. 8 the murum topping of blocks Nos. 1, 2 and 7 will be undertaken and the development of these areas by roads, water supply and sewerage will follow.

Industrial Housing.—In Bombay City apart from some minor schemes affecting Government properties, the work of the Development Department consists of Industrial Housing and the Back Bay Reclamation. There are four Housing schemes and Government have decided that till these are fully utilised further new schemes are not to be embarked on. The schemes which are now complete are as follows :—

1. *Naigaum*—42 chawls.
2. *DeLisle Road*—32 chawls.
3. *Worli*—121 chawls.
4. *Sewri*—12 chawls.

Each chawl with one exception contains 80 rooms of 160 square feet, superficial area. There is a *nahani* in each room, and each floor has its own water supply and modern sanitary conveniences. The areas, in which the chawls are situated, are conveniently situated near the mills and other factories, and are at the same time open and healthy and well provided with open spaces. Out of the 16,524 tenements ready for occupation, over 8,200 were occupied in December 1927 but the subsequent mill-strikes brought the numbers down to 6,500 in August 1928. Provision has been made for shops in the chawls and at Worli there is a specially constructed market place. The Bombay Municipality have opened vernacular schools in the chawls at DeLisle Road, Naigaum and Worli, and the Infant Welfare Society, the Young Men's Christian Association, and the Hindu Maha Sabha are doing good work in the same areas. A Municipal dispensary has been opened at Worli.

The average economic rent of the chawls works out approximately to Rs. 16 per month per tenement but the rents actually charged for rooms let singly are as follows :—

	DeLisle Road.	Naigaum.	Worli.	Sewri.
	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Ground floor rooms .. .. .. } First floor rooms .. .. .. } Second floor rooms .. .. .. }	9 8	7 0	5 0	7 0
Third floor rooms	9 0	7 0	5 0	7 0

On this basis there will be, when the chawls are fully occupied, an annual loss of Rs. 16½ lakhs most of which is covered by the revenue from the cotton cess. Owing to the large number of vacancies, the loss at present is much more than this. The vacancies are mostly at Worli where 77 out of 121 chawls have not been brought into use. At Naigaum there are 5 unoccupied chawls and at DeLisle Road 4.

To large employers of labour, including Government Departments, to societies, institutions and similar organisations, or bodies, and to private individuals acting on behalf of any community or section of the public, concession rents, as under, are charged if whole chawls are rented :—

Chawl area.	Annual rent per chawl.
	Rs.
Worli	3,862
Naigaum	5,478
DeLisle Road	7,398

The above rents include charges for maintenance and repairs, sweepers and sanitary stores *plus* municipal taxes which may vary. These rents are equivalent to an inclusive rent of about Rs. 4, Rs. 5-11-0, and Rs. 7-11-0 per room per mensem at Worli, Naigaum and DeLisle Road, respectively. In fixing them a deduction has been made from the usual rents on account of vacancies, bad debts and the cost of rent collection The offer has so far been availed of by the B. B. & C. I. Railway Company, who have rented five chawls at Worli for housing their employees, by the Bombay Municipality who have taken one whole chawl for housing the employees of the King Edward Memorial Hospital and by Government for housing the police on the G. I. P. and M. & S. M. Railways.

As an experimental measure one chawl at DeLisle Road and one chawl at Naigaum have been converted into two and three-roomed tenements. Four chawls at Worli have been provided with electric lights, as an experiment.

Salsette.—In Salsette, the work of improving communications has been wound up except in the case of the Central-Salsette Tramway and operations are now restricted to departmental suburban schemes and town planning schemes. Nine out of twenty-four suburban schemes are now closed. Of seven residential schemes the most important are those at Khar, Chapel Road (Bandra) and Danda (within Bandra Municipal limits). The Khar scheme provides about 900 building plots between a new railway station of the same name and the sea. The new electric train services have shortened the journey to Bombay City (Victoria Terminus or Church Gate) to 35 minutes. Cheap bus services from and to the station and electric lights and fans have now been introduced. Plots in this scheme under the stimulus of the State-aided building scheme described below continue to find ready buyers. The Chapel Road scheme of 140 building plots is complete. The roads have been transferred for maintenance to the Municipality and only two plots remain for sale. The Danda scheme of 16 acres has excellent road connection with Bandra Station. It has an excellent site and is being gradually built over. The Chembur Garden Suburb scheme in north-west Trombay has been curtailed. The St. Anthony's Homes Co-operative Society have taken up a very large area in this scheme and seem likely to make a success of their enterprise. A small scheme at Santa Cruz (Willingdon South) is also successful. The schemes at Shahar and Kirol North (Ghatkopar) are dormant.

The Kurla-Trombay Railway is now under the control of the G. I. P. Railway. The passenger service from Kurla to Chembur is well patronised. An extension to Mandala which serves also the new Military Explosives Depot was opened in 1927.

The Central-Salsette Tramway runs from Anik to Kurla and then through the Shahar area lying between the G. I. P. and B. B. & C. I. Railways, to Andheri. It is now complete as a single line and was opened for traffic in January 1928.

The Salsette water-supply scheme obtains water from the Bombay Municipality's Tulsi and Vehar mains and supplies it in bulk to the Municipality of Bandra and Kurla. The Development Department has made its own distribution scheme in the areas of Andheri and neighbourhood, Vile Parle, Santa Cruz, Juhu, Khar, Ghatkopar and in Trombay.

In order to help people of moderate means to become owners of their homes, Government have sanctioned a scheme of financial assistance to intending purchasers of plots in the residential schemes of the Development Department. The essential feature of this scheme is that Government will advance at 6 per cent. interest, a sum equal to three-fourths of the cost of land and half the cost of the building which it is intended to erect, the advance being repayable in instalments spread over a period not exceeding 15 years. Another scheme for permanent Government servants on slightly easier terms has also been sanctioned. Government have also sanctioned the extension of the benefits of the State-aided building scheme to Co-operative Housing Societies for building houses on the tenant ownership system. The essential feature of this scheme is that Government will advance to Co-operative Housing Societies which acquire building plots in the estates managed by the Development Department subject to certain conditions, sums to the extent of three-fourth of the value of any plot *plus* half the estimated cost of the building proposed to be erected on it with interest at 5½ per cent. per annum, the advance being as in the former cases repayable in instalments spread over a period not exceeding 15 years.

Industrial Town.—The Ambernath Development Scheme aims at creating a new township to establish industries with all modern facilities. Roads have been provided in the factory area and for staff bungalows and workmen's quarters. The existing sewage arrangements are by means of septic tanks. A market to serve the residents of the area has also been provided. The G. I. P. Railway are running a shuttle service between Kalyan and Badlapur and are remodelling Ambernath Station to deal with the traffic of the factories. An arterial siding for the factories is also being arranged by the Railway.

The water scheme is located at Badlapur five miles from Ambernath Station. The works comprise—(*a*) A barrage across the Ulhas river

about 1½ miles from the railway station; (b) A set of Paterson rapid filters to filter three million gallons of water daily; (c) Protection wall for the Ulhas left bank.

The filtered water is pumped by electric power transmitted from Ambernath to a reservoir on the top of an adjoining hill commanding the factory area. The plant designed for a supply of three million gallons per day is capable of extension at a small cost to six million gallons per day. The reservoir has a capacity of about three million gallons. A proposal to supply the village of Badlapur with filtered water from the scheme has been sanctioned. Proposals for the supply of water to the Kalyan Municipality are under consideration.

A small power station supplies electric energy for running the permanent pumping plant at Badlapur and the factories in the area. The plant has been so laid out that it can easily be supplemented, should further demands arise in the future.

Town Planning Schemes.—The total number of town planning schemes undertaken in the Bombay Suburban District under the provisions of the Bombay Town Planning Act, 1915, is 25. The total area comprised in these schemes is 1486·34 acres. So far 15 town planninig schemes, comprising an area of 663.66 acres have been completed. The cost of works in the completed schemes amounts to Rs. 9,57,000.

Military Lands—Arrangements have been made with the Government of India involving the relinquishment by the military authorities of practically all the land they hold in the Fort area. The services displaced are to be reinstated partly at Deolali and partly at Colaba, where the military area is to be increased by about 245 acres at the southern end of the Back Bay Reclamation. The Government of India have to pay the Government of Bombay for this land. The cost of new buildings, etc., due to the removal of the military from the Fort is to be covered by the sale of the land to be vacated. A large area of land on the Paltan Road Estate (formerly the old Paltan Road Lines) has been sold to the Bombay Municipality. A few plots on the estate and another in Carnac Road have also been sold. The plots available for sale in the Mazagon Defence Yard site have all been sold, while the small site, known as the old Saluting Battery Site, situated at Strand Street on the Harbour Face, south of the Apollo Bunder, was sold to the Port Trust for road widening. The old town barracks in the Fort have been sold to the Bombay Municipality in connection with its Hornby Road Ballard Pier Scheme. New Indian Infantry Lines at Carnegy Lines near Marine Lines, New Indian Infantry Lines at Deolali, the temporary Mechanical Transport Depot at Colaba, the married officers' quarters at Colaba, the Pilot Bunder flats at Colaba, the quarters for the Genral Officer Commanding, Bombay District at Colaba, the new Explosive Depot at Trombay and the new building for Auxiliary Force Headquarters at Marines Lines have been completed. The Bombay Military Lands Scheme is in charge of a Board of Control, consisting of the Secretary to Government, Development Department and the General Officer Commanding, Bombay District. The Audit and Accounts Officer, Bombay Development Scheme, is also Secretary, Board of Control, and Financial Adviser and Audit Officer for the Military Lands Scheme. The staff employed on this scheme do not form part of the Development Department. As military land becomes ready for disposal, it is handed over by the military authorities to the Bombay Government and action in regard to its disposal is taken by the Development Department of Government.

RECLAMATION INQUIRY AND REPORT.

The progress of the Development Scheme came under acute public discussion in 1925-26, and in particular the Reclamation of Back Bay. There were discussions in the Legislative Council and elsewhere, and various committees set up by the Government of Bombay severely criticised the increase in the estimated cost, some indeed the whole financial basis of the Scheme. The Government of India, therefore, in its supreme capacity, set up an over-riding Committee to inquire into the progress and future of the Reclamation.

Chairman :—Sir Grimwood Mears, Chief Justice, Allahabad High Court.

Members : Sir M. Visvesvaraya, K.C.I.E., D.SC., M.I.C.E., Sir Frederick Thomas Hopkinson, K.B.E., M.I.C.E., and Mr. S. B. Billimoria, M.B.

Secretary :—Mr. R. B. Ewbank, C.I.E., I.C.S.

The terms of reference of the Committee were :—

Firstly, to inquire into the history of the inception and conduct of the Back Bay Reclamation Scheme.

Secondly, to make recommendations as regards future operations.

The Committee took evidence in India and in England, and on December 1st signed a unanimous report, which was issued early in 1927. The tenor of this is covered in the following official summary.

The object of the Back Bay Reclamation Scheme was to reclaim from the sea an area on 1,145 acres at an estimated outlay of about Rs. 367 lakhs. Government were prepared to spend on the scheme up to Rs. 400 lakhs if necessary. A revised estimate for Rs. 702 lakhs was approved within two years of the original sanction, and if the scheme is to be completed, a second revision of the estimate will be necessary. The total cost will approximate to about 900 lakhs gross, exclusive of interest charges. This total sum will be reduced by the 256 lakhs to be received from the Military authorities and any other subsequent receipts from sales of land. The programme of the reclamation, which was to have been completed by 1926-27, has completely broken down. If it is continued under present conditions it cannot be finished for many years to come.

It is believed that land reclaimed cannot in the near future be sold at remunerative prices and care should be exercised not to reclaim land in advance of the demand. The work is being constructed from public loans on which interest and sinking fund charges have to be met and Government are faced with a growing debt.

The difficulties in which the scheme is at present involved arise from :—

(1) the unsatisfactory character of the estimates;

(2) defective organisation;
(3) the failure of the dredging operations; and
(4) the fall in land values.

The defects in the various estimates would have been avoided if there had been sufficient and careful preliminary investigation. If an alternative comparative estimate for dry filling had been prepared at the outset and the cost of adequate dredging plant properly investigated, Government might have hesitated to commit themselves to the use of suction dredgers for this scheme. A dredging scheme costing Rs. 400 lakhs was an attractive financial proposition, but it might very well be considered to have changed its character when the cost went up to 702 lakhs. Reclamation by dry filling, if then practicable, might have proved cheaper.

As regards the organisation and arrangements made for the conduct of the scheme, these in themselves were almost unworkable. A reading of clause 3 of the agreement between the Secretary of State in Council and the firm of Meik and Buchanan shows that responsibility was not clearly defined between the Engineers and the Director of Development. Much of the technical work was left to an overworked Chief Engineer or was not done at all. There was no costing system, without which it was impossible properly to control expenditure.

Because nobody believed himself responsible for the due execution of the work, unwise decisions were taken and mistakes made, such, for instance, as commencing the construction of the sea wall from both ends, delay in sealing the rubble mound, undertaking dredging operations in Back Bay without consideration of cost, absence of preconcerted programmes to regulate operations, etc. All these militated against the success of the scheme and added to its cost.

The inability of the dredger to give the required output has been the chief cause of failure and has had a disastrous effect on the financial prospects of the scheme. The principal reason for the present serious position of the scheme was the ordering of the dredger on estimates and specifications put forward by Messrs. Simons and Company which were not examined with due care, the absence of proper guarantees for the sufficient output of the dredger and the acceptance of a quotation for a dredging plant without any real effort to secure competitive tenders.

The work having been undertaken in anticipation of realising large profits, the scheme was subjected to very great criticism when a period of acute trade depression set in with a consequent fall in land values. The trade depression was not a matter which could have been foreseen, although caution was necessary in undertaking a scheme of the magnitude at a time when world conditions were unstable. With the disappearance of the prospect of profits public criticism concentrated on the defects of the scheme.

The Future:—With regard to future operations, the following is a summary of the recommendations which we have made:—

(*i*) For financial reasons the completion of block 8 is a most urgent work.

(*ii*) The foreshore portion along blocks 3, 4, 5 and 6 should be filled in to an average width of 300 feet seaward of the present shore-line and brought up to the ground level of the reclamation. The strip should curve at both ends so as to join on with block 2 at the northern and block 7 at the southern end. This should be done as speedily as possible.

(*iii*) The foreshore strip should be reclaimed with moorum filling.

(*iv*) A complete lay-out of the area to be reclaimed should be prepared. The foreshore strip should be developed as soon as completed and blocks 1, 2 and 7 gradually as land is taken up.

The lay-out already prepared for the complete scheme (1,145 acres) should be re-examined with the help of a Committee; and the lay-one of the area now recommended for reclamation should fit in with the lay-out approved for the complete reclamation, if ultimately undertaken.

(*v*) The Corporation of Bombay should share the cost of development, and Government should arrive at an understanding with the Corporation on this point.

(*vi*) The results of the work on the "Sir George Lloyd" and the "Colaba" during the current season should be verified. If the cost of filling by dredging approximates to that of moorum and the quality of the reclaimed land is satisfactory, they might be used for blocks 1 and 2 after block 7 is completed. If not, they should be disposed of. Notice should not be given to the staff until this point is decided.

(*vii*) The reclamation should be removed from the control of the Development Directorate and carried out in accordance with one or other plans suggested in the report. A small committee, including one or two experienced engineers, should be constituted to advise Government on matters referred to them.

(*viii*) The work should in future, as far as possible, be carried out by contract agency.

(*ix*) Alternative estimates of the cost of the scheme now proposed are submitted. The extension of the 300-foot foreshore strip by additional strips of 400 feet and 300 feet, as need arises, is contemplated. Blocks 1 and 2, as being the most valuable in the whole project, should be completed as soon as possible. No part of them should be assigned for recreation purposes.

(*x*) Detailed revised estimates should be prepared at once. The form of tender issued by the Development Directorate should be revised.

(*xi*) Every endeavour should be made to complete the scheme proposed in three or four years. When a demand arises for completing the whole reclamation, the work may be carried out by moorum filling exclusively.

Conclusions:—Lord Lloyd left England charged by Mr. Montagu to take urgent steps to improve the housing conditions of Bombay. Whilst that did not necessarily imply the undertaking of a reclamation scheme, reclamation had nevertheless been considered for many years to be an integral part of any comprehensive scheme for the betterment of conditions. We are satisfied from the evidence that Mr. Montagu was deeply interested in the Reclamation, and wished it to be carried through. We think that Lord Lloyd and the Government of Bombay were justified in accepting Sir George

Buchanan as an expert to report on Mr. Kidd's scheme, and that having taken the man recommended by the Government of India, the proper and prudent course was to treat his opinion as final and authoritative.

Lord Lloyd's letter of 25th May 1919 shows conclusively that he had no predilection for a reclamation scheme, and that he was prepared to abandon it at once had Sir George Buchanan reported adversely on it.

Though we are aware that a Governor must necessarily rely upon his advisers for the details of any particular scheme, yet having regard to the personal interest displayed by Lord Lloyd, as disclosed by his evidence and that of Sir George Buchanan, we are surprised that his acute intelligence overlooked the apparent inadequacy of Sir George Buchanan's figures, even though he held the belief that the 1912 figures of Mr. Kidd were to some extent inflated. In the Report, Sir George Buchanan himself gave 241·90 lakhs as the figure which he would have estimated in 1912, and on that basis the work could not have been done by him in 1919 for less than 605 lakhs.

To a lesser extent we are surprised that Lord Lloyd, when reading Sir George Buchanan's report, did not notice that Sir George Buchanan described the clay as hard, whilst Messrs. Simons & Co. were putting forward an offer for a soft clay dredger.

We do not agree with Lord Lloyd that this was a technical point. The explanation may be a technical one, but the discovery of the apparent contradiction between the character of the clay as described by Sir George Buchanan and Messrs. Simons & Co. needed no technical knowledge. It stood out on the document and was, unless satisfactorily explained, a contradiction in term.

We are satisfied that Lord Lloyd acted throughout with the highest motives, anxious only to make good his undertaking to Mr. Montagu and to benefit the City of Bombay.

Sir George Curtis, who is living at Dinard, was too ill to attend. He has, however, furnished answers to certain questions which were sent to him. Although he was the Member in Charge during the inception of the scheme he has not been able at this distance of time to give us any information of value, and he cannot enlighten us at all as to the reason why no one in the Government of Bombay queried the varying desciptions of clay or compared the estimates of Mr. Kidd and Sir George Buchanan with reference to 1912 and 1919 prices.

The Estimates.—We cannot understand how Sir George Buchanan's figures found acceptance in Bombay and Delhi even with the addition of some 10 per cent. It was common knowledge that prices of plant, material and labour, when taken collectively had gone up at least 2½ times in the period between 1912 and 1919. The 1912 figure of Mr. Kidd—325·23 lakhs—had been accepted both by the Government of Bombay and the Government of India as a fair figure. If that was the belief, then 367·61 lakhs was a manifest underestimate, and proper scrutiny would infallibly have demonstrated it. When Sir George Buchanan was being questioned on these two sets of figures by the Committee, and the rise in prices and the inevitable inferences arising from them, he "preferred" not to answer the questions.

The failure of the Government of Bombay and the Government of India, and in particular the failure of Sir Sydney Crookshank, to notice the varying descriptions of clay contained in (*a*) Mr. Kidd's Report, (*b*) Sir George Buchanan's Report, (*c*) Messrs. Simons & Co.'s letter of 12th September, 1919, and the "general conditions" enclosed with that letter are regrettable.

The reports of Mr. Kidd and of Sir George Buchanan were not studied with due and proper care by the Bombay Government and the Government of India respectively.

The Government of Bombay ought to have approached the Port Trust and the Royal Indian Marine for permission to dredge in the Harbour before deciding on dredging as the mode of reclamation.

We consider that Sir George Buchanan ought to have made far more extended and careful local investigations. These occupied him for less than a fortnight in May, 1919.

He knew that the Port Trust had had "difficulties" with the dredgers "Kalu" and "Jinga" built by Messrs. Simons & Co. He ought to have made specific inquiries about this, but he did not do so. Mr. Messent, the engineer to the Port Trust, gave him at some time the pamphlet entitled "Some results of the working of the 'Jinga' and 'Kalu.'" A table of figures in that document showed that the average of both vessels was 1,126 cubic yards per hour as compared with 2,000 cubic yards per hour guaranteed and achieved on test. So little attention did Sir George Buchanan pay to this document that at first he said he had never seen it and knew nothing of the figures. A few days later he informed the Committee that he had found a copy of the document and that, as it bore Mr. Messent's initials, he no doubt got it from him.

In his letter of 25th July, 1919, to Messrs. Simons and Company, he wanted "your guarantee that the plant will do the work required." He did not get it. He wanted also a dredger "with a minimum capacity of 2,000 cubic yards of clay per hour." He did not get it. On the contrary, he ultimately accepted a specification in which these two most necessary stipulations were omitted.

Not having studied Mr. Messent's publication, he held the unfounded belief (which a careful reading of Mr. Messent's document would have dissipated) that the results of the work of the "Kalu" and "Jinga" justified him in specifying the same output per hour on test for the "Sir George Lloyd."

The Dredger.—Messrs. Simons and Company, through their representative Mr. McMurray, were well aware that hard clay existed in Bombay Harbour. Partly for that reason they refused a test on site. They suggested a dredger designed for soft clay but gave no guarantee that it would do the required work or give a minimum output of 2,000 cubic yards per hour. In drafting their offer of 12th September 1919, we think they were more concerned in protecting themselves than in supplying a dredger fit for the known purpose for which it was going to be used. Accepting

Mr. McMurray's own account of the interviews of July and August 1919, we disapprove of his attitude and that of his firm. Sir George Buchanan accepted any conditions they made, because he had the fixed belief that the harbour reclamation was in all respects the same problem as the Sewri, and because of his erroneous belief in the capacity of the "Kalu" and "Jinga."

The capacity of the dredger was much too low, and a guarantee of an output of soft clay "at the rate of" 2,000 cubic yards per hour on test meant infallibly an output under ordinary working conditions of much less. The position seems ultimately to have been appreciated by Sir George Buchanan, who, in his report of 15th December, 1924, thought it "improbable with the class of material now being taken from the harbour that the 'Sir George Lloyd' will do her estimated output of five million cubic yards per annum." In the same report he said "if we get two-thirds of the total output we shall be doing well."

Having regard to the great initial outlay and the need for speedy realisation, the time within which the work would be completed was an element of the highest importance.

We are convinced that no crew, however skilful and diligent, ever can or will get anything like five million cubic yards of material from the Harbour in any one season by the agency of the "Sir George Lloyd." In a deep bed of soft clay they probably would get from time to time material at the rate of 2,000 cubic yards per hour. The first two reasons given by Mr. Halcrow in his report and set out in the body of this document are conclusive against the possibility of any continuous happening of this kind. The material on the average is too stiff, the depth of material uncertain, the bed of the sea uneven, with upcropping rock, stones and moorum, the capacity of the dredger too low.

Whilst we are of opinion that the "Sir George Lloyd" would under test conditions have delivered 2,000 cubic yards of soft clay per hour, and therefore conformed to the building contract, of we are opinion that the "Colaba" did not do so, and that she was structurally weak. In our view she ought to have been stiff enough to take any variation in load without sustaining damage by vibration.

In November, 1919, Sir George Buchanan being in ignorance of the quality and characteristics of the silt or mud and clay in the harbour, ought, as a measure of prudence, to have advised the Government of Bombay that no decision should be come to to treat the reclamation as a dredging problem until check borings had been taken to ascertain the density, depth and resistance of the silt or mud and clay in various parts of the harbour, and also that it was essential to ascertain by experiment whether the material obtained from the bed of the sea would dry out when deposited in an area under reclamation. Certainty on these points could have been arrived at by December, 1919, and the check borings were all the more necessary as Messrs. Simons had at this time definitely refused a test at Bombay.

With regard to the order of the dredger we consider Sir George Buchanan committed grave errors of judgment. The principal cause of the failure of the dredging operations arose, in our opinion, from the fact that Sir George Buchanan did not take the trouble to ascertain the working records of the "Kalu" and "Jinga," and believing that they had done "extraordinarily good work" was of opinion that vessels of a slightly increased horse-power of the same type would be adequate for the work. A most serious mistake in connection with the order of the dredger was the assumption that a machine capable of dredging 2,000 cubic yards on a short test would be capable of averaging that quantity during a whole season.

The Wall.—The building of the sea wall at both ends simultaneously was disastrous. Though the suggestion emanated from the Government of Bombay who must therefore take the greater part of the responsibility, we are of opinion that Sir George Buchanan should have advised against it, and resisted it, and should in the circumstances of the sale of Block 8 to the Military have prepared a programme for the building of the wall and the commencement of the Reclamation from the Colaba end only.

Moreover, the building of the sea wall from both ends simultaneously prevented the continuance of the original and sensible plan which was to shut in an area as soon as possible and pump into it with the least possible delay.

We are quite unable to accept the theory set up by Sir George Buchanan that the phrases "soft clay" and "stiff clay" as used by him connoted the same density of material. Also we cannot accept his explanation that where he uses the words "hard clay" or "closely compacted clay" or other equivalent phrase, he meant, not that it was hard in its position in the harbour, but that it was of a character which would become hard when pumped into the reclamation.

The firm of Messrs. Meik and Buchanan did not prepare proper programmes of work nor adhere to any fixed programme. The reason of their indecision with regard to the dredging was due partly to the limitation of area by the Port Trust and Royal Indian Marine (for which neither the firm nor Sir George Buchanan can be held accountable), but principally to the fact that, having no certain belief in the quality of the material in the harbour, they were unable to formulate proper and precise future plans.

Sir George Buchanan did not realize that he was the expert to whom from first to last the Government looked for advice and assistance. He did not appreciate that when he found causes for complaint it was his duty to require them to be remedied, and in virtue of his responsibility for supervision to see that they were remedied. In his evidence he ascribed to himself a position of no power, weight or importance, and he allowed his opinion to be disregarded. We think that this was an entire misconception of his position, and he never ought to have allowed his advice to be set on one side. On such occasions as this happened he should at once have realised his duty to the Government of Bombay and assisted them by making the facts known to them, and we can have no doubt that Lord Lloyd and Sir Leslie Wilson would have welcomed information and would have given all help and encouragement

to Sir George Buchanan in any effort made by him to advance the work.

Responsibility.—The agreement of the 17th March, 1921, between the firm of Meik and Buchanan and the Secretary of State for India in Council was an unhappily framed document. Clause 3 gave Sir Lawless Hepper the opportunity of saying that as the Resident Engineer had to carry out the details of the work in accordance with the firm's instructions, that therefore the firm were responsible for the due execution of the works. On the other hand, Sir George Buchanan naturally pointed to the sentence, also in Clause 3, that the Resident Engineer should be "subject to the control of the Director of Development." From this arose a mutual misunderstanding. Thus from the outset neither Sir George Buchanan nor Sir Lawless Hepper seemed to have a very clearly defined idea of their respective duties. Later, when the disaster was threatening the enterprise, each relied upon his interpretation of the agreement. Sir Lawless Hepper, when giving evidence, insisted before us that Sir George Buchanan was entirely responsible for the due execution of the works, as if he were, in fact, a contractor who had undertaken them. On the other hand, Sir George Buchanan contended that that responsibility lay with Sir Lawless Hepper, pointing out that he it was who had control of the Resident Engineer, and that his firm has no power of dismissal over any of the staff. On the strict construction of the agreement we incline to the opinion that Sir George Buchanan is right, although there are statements of his to be found in his correspondence which would bear the interpretation that he did regard his firm as responsible for the actual carrying out of the works.

If the Government of Bombay intended to make Sir George Buchanan's firm responsible for the execution of the works, nothing was easier than to say so in plain and simple words, and as a necessary corollary to put the Resident Engineer entirely under the control of his firm, including the power of appointment and the power of dismissal. The provision that the Government of Bombay should pay the Resident Engineer would not have detracted from a provision that the firm should be responsible for the due execution of the work, nor from the legal position that the Resident Engineer would have been the servant and agent of Sir George Buchanan. In that way the position of Sir George Buchanan and Sir Lawless Hepper would have been perfectly clearly defined.

The reports of the Development Directorate, drafted by Sir Lawless Hepper, cannot be justified. They did not present a true picture of the progress of the work and concealed material circumstances.

We are of opinion that Sir Lawless Hepper had so much work in connection with the other Development Schemes that even if he had appreciated his responsibility for the execution of the works he could only have carried out that duty as regards the Reclamation by neglecting other duties relating to the other schemes.

Mr. Lewis was not a "specialist in sea works and dredging"; Sir George Buchanan ought not to have nominated him. He was however, greatly handicapped by the necessity of preparing a detailed project estimate, and this so absorbed his energies that he was unable to devote himself fully to supervising and pushing on the work. Very shortly after he became Resident Engineer we are satisfied that he was in ill health which became manifest and disabled him in 1922. It is most regrettable that he was allowed (contrary to Sir George Buchanan's advice) to remain at his post till July, 1924.

We are of opinion that Mr. Elgee, Mr. O'Rorke and Mr. Speirs have done their best on all occasions to promote the interests of the Reclamation, and that the quarry, constructional and dredging staff have done their duty.

It has been put forward that the Reclamation of Back Bay would, by providing more land in the business and residential area, in some way relieve housing conditions of the poorer classes. That, in our opinion, is too remote for serious consideration, but, has Back Bay proved to be the financial success which was anticipated, the advantage to all classes of persons in the City and throughout the Presidency would have been that there would have been available immense sums of money to be used for any purpose pleasing the Legislative Council. The confident anticipation of profits had no doubt considerable weight in causing the reclamation of Back Bay to be accepted as an integral and necessary part of any comprehensive plan of development.

Action on the Report.—Having regard to the recommendations made by the Mears' Committee and in accordance with the wishes of the Legislative Council, Government have decided for the present to confine future operations in connection with the Back Bay Reclamation Scheme to the reclamation and development of blocks Nos. 1, 2 and 7 and reclamation of block No. 8 (undeveloped) with a marine drive along the existing foreshore connecting blocks 2 and 7. The area under reclamation has thus been reduced from 1,145 to 552 acres. A representative committee has also been constituted with a view to advise Government on all important matters connected with the reclamation. A layout plan in respect of the blocks which are proposed to be reclaimed has been prepared and is now before another committee specially appointed for the purpose. A revised detailed estimate in respect of the reduced scheme is also under preparation. The dredger "Kalu" in conjunction with the intermediate pumping station "Jinga" will be commissioned to work in connection with block No. 1 from October 1927. The dredging into this block will be continued up to May 1928, and resumed in October 1928, if necessary. The entire work of murum topping on block No. 8 has been given on contract and proposals for letting out the remaining work on contract basis is under consideration. At the request of the Military authorities, an area of about 24 acres in block No. 8 has been prepared in advance of the rest of the block and was handed over in 1927 The remaining portion of block No. 8 is expected to be transferred to them by May 1928 at the latest. The programme of reclamation, as at present contemplated, is expected to be completed by 1931-1932.

The Indian Ports.

The administration of the affairs of the larger ports (*Calcutta, Bombay, Madras, Karachi, Rangoon and Chittagong*) is vested by law in bodies specially constituted for the purpose. They have wide powers, but their proceedings are subject in a greater degree than those of municipal bodies to the control of Government. At all the ports the European members constitute the majority and the Board for Rangoon consists mainly of European members.

The income, expenditure and capital debt, according to the latest figures obtainable from the Department of Commercial Intelligence and Statistics (India) of the six principal ports managed by Trusts (Aden is excluded from the tables) are shown in the following table:—

—	Income.	Expenditure.	Capital Debt.
	Rs.	Rs.	Rs.
Calcutta ..	3,21,27,748	3,15,44,101	17,75,31,194
Bombay ..	2,97,27,130	2,90,16,839	22,60,68,405
Madras ..	35,12,861	30,88,982	1,41,14,721
Karachi ..	68,02,570	64,01,613	4,35,24,000
Rangoon ..	85,88,932	71,33,776	3,78,90,182
Chittagong.	7,24.062	4,67,368	3,68,202

CALCUTTA.

The Commissioners for the Port of Calcutta are as follows. —

Appointed by Government.—

Mr. S. C. Stuart-Williams, Chairman.

Mr. T. H. Elderton. Deputy Chairman and Secretary.

Elected by the Bengal Chamber of Commerce.—Mr. B. E. G. Eddis, (Messrs. Gillanders Arbuthnot & Co.), Mr. J. Y. Philip, M.L.C., (Messrs. Kilburn & Co.), A. McD Eddis, M.L.C. (Messrs Gladstone Wyllie & Co.) Mr. H. C. Edmonson, (Messrs. Turner Morrison & Co.). Mr. J. H. Fife, (Messrs. Mackinnon Mackenzie & Co.), Mr. J. A. Tassie, (Messrs. James. Finlay & Co.).

Elected by the Calcutta Trades Association.—Mr. J. H. Wiggett, M.B.E., (Messrs. T.E. Thomson & Co.).

Elected by the Bengal National Chamber of Commerce.—Mr. J. C. Banerjee, Rai Bahadur, A. C. Banerjee (Messrs. Behar Firebricks & Potteries, Ltd.) Mr. Nalini Ranjan Sarker, M.L.C. (The Hindusthan Co-operative Insurance Society, Ltd.)

Elected by the Indian Chamber of Commerce.—Mr. D. S. Erulkar, (The Scindia Steam Navigation Co., Ltd.)

Elected by the Municipal Corporation of Calcutta.—Dr. Narendra Nath, Law, M.A.B.L., P.R.S., P.H.D.

Nominated by Government.—Mr. C. W. A. Carroll, (Agent, Bengal-Nagpur Railway), Mr. G. L. Colvin, C.B., C.M.G., D.S.O. (Agent, East Indian Rly.), Mr. N. Pearce, (Agent, Eastern Bengal Rly.), Mr. G. S. Hardy, I.C.S., (Collector of Customs) and Capt. C. A. Scott, D.S.O. R.I.M.

The principal officers of the Trust are—

Traffic Manager.—Mr. W. A. Burns.

Chief Accountant.—Mr. N. G. Park, C.A.

Chief Engineer.—Mr. J. McGlashan, M. Inst. C.E.

Deputy Conservator.—Commander C. V. L. Norcock, O.B.E., R.N.

Medical Officer.—Lt.-Col. H. B. Steen, I.M.S.

Consulting Engineer and London Agent.—Mr. J. Angus, M. Inst. C.E.

The traffic figures and the income of the Trust for the last thirteen years are as follows:—

Year.	Docks.			Jetties.	Stream.		Nett tonnage of shipping entering the Port.	Income.
	General Exports	Coal Exports	Imports.	Imports.	Exports.	Imports.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Rs.
1914-15	920,659	2,633,805	700,133	917,978			3,714,344	1,44,50,349
1915-16	1,054,985	1,610,645	570,997	788,481			2,967,798	1,59,35,456
1916-17	1,185,159	1,994,528	444,210	686,010			2,804,680	1,57,23,432
1917-18	995,112	1,014,993	363,383	633,693			2,094,011	1,58,39,175
1918-19	1,097,562	1,333,285	482,403	575,833			2,292,462	1,90,53,513
1919-20	1,146,479	2,264,976	653,066	713,746			2,941,846	2,23,55,614
1920-21	1,133,719	3,046,400	413,357	685,080			4,017,514	2,66,08,032
1921-22	974,783	1,687,222	697,361	622,411			3,446,021	2,19,17,042
1922-23	1,414,166	1,174,041	304,109	680,053			3,336,722	2,64,75,522
1923-24	1,722,305	1,325,801	221,035	761,920			3,621,243	2,60,89,027
1924-25	1,779,054	1,495,915	290,412	874,714			3,845,788	2,78,23,364
1925-26	1,494,442	1,796,409	352,714	951,442	2.231,637	1,601,941	3,887,560	3,21,27,748
1926-27	1,465,854	2,476,794	455,577	963,297	2,344,800	1,513,885	4,177,118	3,12,02,183
1927-28	1,837,371	2,817,443	480,367	1,007,917	2,689,186	1,606,728	4,638,569	3,38,82,124

BOMBAY.

BOARD OF TRUSTEES.—*Nominated by Government*—Mr. W. H. Neilson, O.B.E., M. Inst. C.E., M. I. Mech. E. (Chairman), Mr. A. R. Dalal, I.C.S., Rear-Admiral Walwyn, C.B., D.S.O., R.I.M., Mr. A. M. Green, I.C.S., Sir Ernest Jackson, Kt., C.I.E., Mr. T. G. Russell, Mr. R. D. Bell, C.I.E., I.C.S., and the General Officer Commanding, Bombay District.

Elected by the Chamber of Commerce—Mr. F. C. Annesley, Sir Leslie Hudson, Kt., Mr E. Miller, Mr. G. L. Winterbotham and Mr. P. Barker.

Elected by the Indian Merchants' Chamber.—Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., the Hon'ble Sir Manmohandas Ramji, Kt., Mr. Lalji Naranji, Mr. Mathuradas Canji Mattani and Mr. Lakhmidas Rowjee Tairsee.

Elected by the Municipality.—Mr. Fazul Ibrahim Rahimtulla and Mr. Meyer Nissim.

Elected by the Millowners' Association.—Mr. A. Geddis.

The following are the principal officers of the Trust :—

Dy. Chairman, W. R. S. Sharpe, M. Inst. T.

SECRETARY'S DEPARTMENT.

Secretary, N. M. Morris, *Deputy Secretary*, A. S. Bakre, M.A. (Cantab.), Bar-at-Law. *Head Clerk*, J. D. Mhatre.

CHIEF ACCOUNTANT'S DEPARTMENT.

Chief Acctt., C. P. Gay, *Deputy Acctts.*, J. F. Pereira, B.A., and W.D. Read, *Asst. Acctts.*, W. E. McDonnell, B. S. Turkhud, J.P., and R. O. Collyer, *Junior Asstt. Acctts.*, H. W. Scott and A. N. Moos, *Cashier*, V. D. Jog, *Ry. Audit Inspectors*, W. Casling, R. C. Palais and Bhikaji Ramchandra, *Supdt., Stores Accounts Branch*, O. Hyde, *Supdt., Establishment Branch*, A. R. Javeri.

CHIEF ENGINEER'S DEPARTMENT.

Chief Engineer, J. McClure, M. Inst. C.E., *Deputy Chief Engineer*, G. E. Bennett, M.Sc., M. Inst. C.E., M.I. Mech. E., *Executive Engineers*, C. W. Wales, M. Inst. C.E., B. C. Rowlandson, F. G. Carron, M. Inst. C.E., and A. Hale-White, M.A., A.M.I.C.E., *Senior Assistant Engineers*, G. E. Terry, A.M.I.C.E., J. A. Rolfe, P.E. Vazifdar, L.C.E. (1st Class), *Engineering Assistants*, E. L. Everatt, A.M.I.C.E., *Personal Assistant to the Chief Engineer*, T. B. Hawkins, *Mechanical Supdt.*, R. McMurray, M.I. Mech E., *Asst. Mechanical Supdts.* R. B. McGregor, A.M.I.M.E., B. C. Sharpe, S. J. Watt and W. O. A. Young, B. Sc. (Engr.), *Chief Foreman*, A. C. Strelley, M.I.M. A.E.E.

DOCKS MANAGER'S DEPARTMENT.

Docks Manager, C. N. Rich, B.A., *Deputy Docks Managers*, F. A. Borissow, W. G. H. Templeton, and F. Seymour Williams, *Deputy Manager* (Office), P. A. Davies, *Asst. Docks Managers, 1st and 2nd grade*, E. C. Joiley, A. Mattos, L. E. Walsh, C. W. Bond, F. J. Warder, D. L. Lynn, C. O. A. Martensz, P. B. Fenner, Nanabhoy Framji, E. J. Kail, and Perozshaw Bezonji, *Cash Supervisor*, T. D'Silva, *Cashier*, Robert Fernandez.

RAILWAY MANAGER'S DEPARTMENT.

Railway Manager, J. R. Reynolds, C.I.E., V.D. (on leave preparatory to retirement), *Ag. Ry. Manager*, D. G. M. Mearns, *Deputy Railway Manager Supernumerary*, A. F. Watts, *Ag. Dy. Ry. Manager*, H. A. Gardon, *Assistant Railway Manager*, S. G. N. Shaw, *Ag. Asstt. Rly. Manager*, C. F. Chard, *Asstt. Traffic Supdt.*, W. H. Brady. *Ag. Office Supdt.*, Kashinath Gangadhar.

PORT DEPARTMENT.

Port Officer, Capt. E. V. Whish, O.B.E., R.I.M., J.P., *Asstt. Port Officer*, Comdr. A. G. Kinch, D.S.O., R.I.M., *Harbour Master*, W. S. Hoseason J.P. *Alexandra Dock, Senior Dock Master*, T. G Warland. *Dock Master*, J. McMillan, *Senior Asstt Dock Master*, C. Halle, *Asst. Dock Master*, J. A. Puddington, *Berthing Masters*, H. F. Eddowes, D. Broadey, G. J. Kedge, F. H. Kellard *Prince's and Victoria Docks, Dock Masters*, C. H. Croie-Rees (I C. P. and Victoria Docks), *Dock Master*, A. J. Milness (Prince's Dock), *Astt. Dock Masters*, W. P. Bigg, *Berthing Masters*, W. J. Barter, A. M. Dudley, L. G. Grint. and another; *Port Deptt. Inspector*, J. Munster, *Office Supd.*, Moses Samuel.

LAND AND BUNDERS DEPARTMENT.

Manager, F. H. Taylor, P.A.S.I., M.R.S.I.; *Deputy Manager*, B. C. Durant, *Personal Asst. to the Land Manager*, R. G. Deshmukh, B.A., LL.B., *Office Supdt.*, W. O'Brien, *Asst. Managers*, S. J. Plunkett, W. H. Cummings and C. P. Watson, *Chief Inspector*, G. C. Battenberg, *Head Clerk*, D. A. Pereira.

CONTROLLER OF STORES DEPARTMENT.

Controller of Stores, H. E. Lees, *1st Assistant*, W. J. Wilson. *2nd Assistant*, G. P. Dooley, *Statistical Supdt.*, B. F. Davidson.

MEDICAL DEPARTMENT.

Administrative Medical Officer, Dr. W. Nunan, B.A., M.D., B.Ch., *Medical Officers*, Dr. F. D. Bana, M.B., M.R.C.S. (South District), Dr. A. D. Karkhanawalla, M.B.B.S. (North District), Dr. M. Vijayakar, L.M. & S., *Superintendent Antop Village.*

The revenue of the Trust in 1927-28 amounted to Rs. 2,81,07,566. The expenditure amounted to Rs. 2,73,54,098. The result of the year's working was a surplus of Rs. 6,59,517 under General Account which has been transferred to the Revenue Reserve Fund, and a surplus of Rs. 93,950 under Pilotage Account. The balance of the Revenue Reserve Fund at the close of the year amounted to Rs. 72,77,788. The aggregate captial expenditure during the year was Rs. 11,86,374. The total debt of the Trust at the end of the year amounted to Rs. 22,42,11,714.

The trade of the Port of Bombay during the last official year aggregated 251 crores in value.

The following statement shows the number of steam and square-rigged vessels which during recent years have entered the docks or been berthed at the harbour walls and paid dues.

The Indian Ports.

The administration of the affairs of the larger ports (*Calcutta, Bombay, Madras, Karachi, Rangoon and Chittagong*) is vested by law in bodies specially constituted for the purpose. They have wide powers, but their proceedings are subject in a greater degree than those of municipal bodies to the control of Government. At all the ports the European members constitute the majority and the Board for Rangoon consists mainly of European members.

The income, expenditure and capital debt, according to the latest figures obtainable from the Department of Commercial Intelligence and Statistics (India) of the six principal ports managed by Trusts (Aden is excluded from the tables) are shown in the following table:—

—	Income.	Expenditure.	Capital Debt.
	Rs.	Rs.	Rs.
Calcutta ..	3,21,27,748	3,15,44,101	17,75,31,194
Bombay ..	2,97,27,130	2,90,16,839	22,60,68,405
Madras ..	35,12,861	30,88,982	1,41,14,721
Karachi ..	68,02,570	64,01,613	4,35,24,000
Rangoon ..	85,88,932	71,33,776	3,78,90,182
Chittagong.	7,24,062	4,67,368	3,68,202

CALCUTTA.

The Commissioners for the Port of Calcutta are as follows.—

Appointed by Government.—

Mr. S. C. Stuart-Williams, Chairman.

Mr. T. H. Elderton, Deputy Chairman and Secretary.

Elected by the Bengal Chamber of Commerce.—Mr. B. E. G. Eddis, (Messrs. Gillanders, Arbuthnot & Co.), Mr. J. Y. Philip, M.L.C., (Messrs. Kilburn & Co.), A. Mc.D Eddis, M.L.C. (Messrs Gladstone Wyllie & Co.) Mr. H. C. Edmonson, (Messrs. Turner Morrison & Co.). Mr. J. H. Fife, (Messrs. Mackinnon Mackenzie & Co.), Mr. J. A. Tassie, (Messrs. James. Finlay & Co.).

Elected by the Calcutta Trades Association.—Mr. J. H. Wiggett, M.B.E., (Messrs. T.E. Thomson & Co.).

Elected by the Bengal National Chamber of Commerce.—Mr. J. C. Banerjee, Rai Bahadur, A. C. Banerjee (Messrs. Behar Firebricks & Potteries, Ltd.) Mr. Nalini Ranjan Sarker, M.L.C. (The Hindusthan Co-operative Insurance Society, Ltd.)

Elected by the Indian Chamber of Commerce.—Mr. D. S. Erulkar, (The Scindia Steam Navigation Co., Ltd.)

Elected by the Municipal Corporation of Calcutta.—Dr. Narendra Nath, Law, M.A.B.L., P.R.S., P.H.D.

Nominated by Government.—Mr. C. W. A. Carroll, (Agent, Bengal-Nagpur Railway), Mr. G. L. Colvin, C.B., C.M.G., D.S.O. (Agent, East Indian Rly.), Mr. N. Pearce, (Agent, Eastern Bengal Rly.), Mr. G. S. Hardy, I.C.S., (Collector of Customs) and Capt. C. A. Scott, D.S.O. R.I.M.

The principal officers of the Trust are—

Traffic Manager.—Mr. W. A. Burns.

Chief Accountant.—Mr. N. G. Park, C.A.

Chief Engineer.—Mr. J. McGlashan, M. Inst. C.E.

Deputy Conservator.—Commander C. V. L. Norcock, O.B.E., R.N.

Medical Officer.—Lt.-Col. H. B. Steen, I.M.S.

Consulting Engineer and London Agent.—Mr. J. Angus, M. Inst. C.E.

The traffic figures and the income of the Trust for the last thirteen years are as follows:—

Year.	Docks.			Jetties.	Stream.		Nett tonnage of shipping entering the Port.	Income.
	General Exports	Coal Exports	Imports.	Imports.	Exports.	Imports.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Rs.
1914-15	920,659	2,633,805	700,133	917,978			3,714,344	1,44,50,349
1915-16	1,054,985	1,610,645	570,997	788,481			2,967,798	1,59,35,456
1916-17	1,185,159	1,994,528	444,210	686,010			2,804,680	1,57,23,432
1917-18	995,112	1,014,993	363,383	633,693			2,094,011	1,58,39,175
1918-19	1,097,562	1,333,285	482,403	575,833			2,292,462	1,90,53,513
1919-20	1,146,479	2,264,976	653,066	713,746			2,941,846	2,23,55,614
1920-21	1,133,719	3,046,400	413,357	685,080			4,017,514	2,66,08,032
1921-22	974,783	1,687,222	697,361	622,411			3,446,021	2,19,17,042
1922-23	1,414,166	1,174,041	304,109	680,053			3,336,722	2,64,75,522
1923-24	1,722,305	1,325,801	221,035	761,920			3,621,243	2,60,89,027
1924-25	1,779,054	1,495,915	290,412	874,714			3,845,788	2,78,23,364
1925-26	1,494,442	1,796,409	352,714	951,442	2.231,637	1,601,941	3,887,560	3,21,27,748
1926-27	1,465,854	2,476,794	455,577	963,297	2,344,800	1,513,885	4,177,118	3,12,02,183
1927-28	1,837,371	2,817,443	480,367	1,007,917	2,689,186	1,606,728	4,638,569	3,38,82,124

excluding those which have remained for unloading and loading in the harbour stream :—

Year.			Number.	Tonnage.
1911–12	..	..	1,519	2,767,913
1912–13	..	..	1,566	2,926,506
1913–14	..	..	1,579	3,135,597
1914–15	..	..	1,880	4,417,035
1915–16	..	..	1,794	3,939,721
1916–17	..	..	2,112	5,031,572
1917–18	..	..	2,069	4,746,578
1918–19	..	..	2,058	4,526,846
1919–20	..	..	2,164	4,874,820
1920–21	..	..	2,029	4,589,627
1921–22	..	..	2,123	4,895,968
1922–23	..	..	1,907	4,429,263
1923–24	..	..	2,044	4,661,904
1924–25	..	..	1,890	4,500,636
1925–26	..	..	1,894	4,570,038
1926–27	..	..	1,842	4,386,312
1927–28	..	..	2,027	4,864,344

The two dry docks were occupied during the year 1927-28 by 194 vessels, the total tonnage amounting to 696,415 tons which was more than the previous year by 70,612 tons.

KARACHI.

The members of the Board of Trustees of the Port of Karachi are as follows :—

Chairman.—J. B. S. Thubron, C.I.E.

Appointed by Government.—H. H. Hood, (Collector of Customs, Karachi); H. F. Lockwood, (Divisional Superintendent, North-Western Railway); Captain C. H. Peck, D.S.O., M.C., R.A. (D.A.A.Q.M.G., Sind Independent Brigade Area); Mir Ayub Khan, Bar-at-Law.

Elected by the Karachi Chamber of Commerce.—H. C. Whitehouse, (Strauss & Co.); E. A. Pearson, (Forbes, Forbes, Campbell & Co., Ld.) (On leave); J. R. N. Graham, V.C. (Grahams Trading Co.), (acting) W. M. Petrie, (Ralli Brothers); J. J. Flockhart (Mackinnon, Mackenzie & Co.)

Elected by the Karachi Indian Merchants' Association:—Lokamal Chellaram, Isherdas N. Mallik.

Elected by the Buyers & Shippers Chamber.—Jamshed N. R. Mehta (Vice-Chairman), Haridas Lalji.

Elected by the Karachi Municipality.—Tikamdas Wadhumal, M.A (Oxon), Bar-at-Law.

The principal officers of the Trust are :—

Secretary & Traffic Manager.—T. S. Downie, O.B.E.

Port Officer.—Capt. J. F. Vibart, O.B.E., R.I.M.

Chief Accountant—B. A. Inglet, B.A., C.A.

Chief Engineer.—W. P. Shepherd-Barron, M. Inst. C.E.

Deputy Chief Engineer.—H. A. L. French, M. Inst. C.E.

Chief Storekeeper.—R. A. Donde.

The Revenue receipts and expenditure of the Port of Karachi for the year 1927–28 were as under :—

Revenue receipts (excluding the Port Fund Account) Rs. 65,65,965. Revenue Expenditure Rs. 58,34,767. Surplus Rs. 7,31,198. Reserve Fund Rs. 45,25,700.

The number of vessels which entered the Port during the year 1927-28, exclusive of vessels put back and fishing boats was 2,938 with a tonnage of 2,602,353 against 3,023 with a tonnage of 2,382,713 in 1926-27. 950 steamers of all kinds entered the Port with a tonnage of 2,488,849 against 88[illegible] and 2,256,969, respectively, in the previous year. Of the above, 763 were of British nationality.

Imports landed at the ship wharves during the year totalled 630,458 tons against 600,805 in the previous year. Total shipments from the ship wharves were 760,356 tons in 1927-28 against 580,118 tons in 1926-27.

MADRAS.

The following gentlemen are the Trustees of the Port of Madras :—

Officials—Sir Bradford Leslie, Kt., O.B.E., M. Inst. C.E., M.I.E.E., Chairman and Chief Engineer; C. R. Watkins, C.I.E., (Collector of Customs); and Capt. C. R. Campbell, D.S.O., M.V.O., R.I.M. (Presidency Port Officer).

Non-Officials.—(1) *Nominatd by Government.*—F. B. Wathen, M.B.E., V.D., M. Inst. T.; P. Rothera, O.B.E., M. Inst. C.E.; I.M.I.E.; (2) *Representing Chamber of Commerce, Madras.*—W. O. Wright, Sir James Simpson, Kt., Kenneth Kay, F. Birley,; (3) *Representing Soutern India Chamber of Commerce, Madras.*—M. R. Ry. Diwan Bahadur Govindoss Chathoorbhujadoss Garu, Diwan Bahadur G. Narayanaswamy Chetty Garuti (4) *Representing Madras Trades Association.*—H. S. Walton, R. J. C. Robertson; (5) *Representing Southern India Skin and Hide Merchants' Association.*—M. Mohamed Ismail Sahib, Bahadur; *Representing Madras Piece-goods Merchants' Association.*—M. R. Ry. Rao Sahib B. Papayya Chetty Garu.

Principal Officers are :—Deputy Chief Engineer, W. Fyffe, M. Inst. C.E., M. I. Struct. E. Executive Engineer, M. R. Ry. Rao Bahadur K. Ganapathy Kudwa Avergal, B.A., B.C.E.; Mechanical and Electrical Engineer, Captain E. G. Bowers, M.C., A.M.I.E.E.; Assistant Mechanical Engineer, W. White, M.I. Mar. E.; Assistant Enginer, M. R. Ry. V. Dayananda Kamath Avergal, B.A., B.E.; Assistant Engineer, M. R. Ry. S. Nagabushanam Avergal, B.A., M.E. Assistant Engineer (Electrical), M. R. Ry. K. Subramaniam; Traffic Manager (on leave) J. G. Lord.; Assistant Traffic Managers, F. W. Stooke and James Chance; Chief Accountant, M. R. Ry. Rao Bahadur

RANGOON.

S. Narayana Aiyar Avergal, M.A.; Manager and Accountant, M. R. Ry. Rai Sahib S. Seshiah Avergal; Office Manager, J. L. Pinto.

The receipts during the year of the Port Trust on Revenue account from all sources were Rs. 45,04,712 as against 37,39,364 in 1926-27 and the gross expenditure out of revenue was Rs. 49,69,147. During the year 936 vessels with an aggregate tonnage of 3,013,109 tons, called at the port against last year's figure of 795 vessels of 2,609,935 tons.

The personnel of the Commissioners for the Port of Rangoon is comprised of seventeen members.—

Appointed by Government.—Mr. J. A. Cherry, C.I.E. (Chairman); Captain C.R. Goad, R.I.M. (Principal Port Officer); Messrs. W. Keay and T. Cormack.

Ex-officio.—Messrs. W. W. Nind (Collector of Customs); W. B. Brander, C.I.E., C.B.E., I.C.S., M.L.C. (Chairman, Rangoon Development Trust) and J.R.D. Glascott, C.I.E., M.L.C. (Agent, Burma Railways).

Elected by the Burma Chamber of Commerce.—Messrs. J. R. Turner, (Vice-Chairman); W. T. Howison and M. L. Burnet (one seat vacant).

Elected by the Rangoon Trades Association.—Mr. J. Fisher.

Elected by the Chinese Chamber of Commerce.—Mr. Lee Boon Tin.

Elected by the Burma Indian Chamber of Commerce.—Khan Bahadur Hajee Ahmed Chandoo and Virjeebhai Dahya.

Elected by the Small Rice Millers' Association.—U. Thwin.

Elected by the Rangoon Municipal Corporation.—U. Ba Pe, M.L.C.

Principal officers are—

Secretary.—Mr. C. Witcher.

Chief Accountant.—Mr. D. H. James, A.C.A.

Chief Engineer.—Mr. E.C. Niven, M. Inst. C.E.

Deputy Conservator.—Mr. H. N. Gilbert.

Traffic Manager.—Mr. E. J. B. Jeffery, (Officiating).

The receipts and expenditure on revenue account for the Port of Rangoon in 1927-28 were—

Receipts	..Rs. 86,36,636.
Expenditure	..Rs. 83,78,211.

The capital debt of the Port at the end of the year was Rs. 4,72,33,781. The balance (including investments at cost) at the credit of the different sinking funds on 31st March 1928 was Rs. 1,61,80,951.

The total sea-borne trade of Rangoon during the year 1927-28 was 5,558,831 tons of which 1,968,688 tons were imports, 3,575,075 tons exports and 15,068 tons transhipment. The tonnage of goods passed over the Commissioner's premises during the year amounted to 3,672,372 tons. The total number of steamers (excluding Government vessels) entering the Port was 1,627 with a total net registered tonnage of 3,886,950 being an increase of 179 steamers and 73,386 tons in nett tonnage over that of 1926-27.

CHITTAGONG.

Chittagong in Eastern Bengal, lying on the right bank of the river Karnafuli at a distance of 12 miles from the sea, was already an important port in the sixteenth century, when the Portuguese gave it the name of Porto Grande.

The construction of the Assam-Bengal Railway has facilitated the transport of trade with Assam and Eastern Bengal for which the Port of Chittagong is the natural outlet.

The chief exports are tea and jute and imports piece-goods, salt, oil and machinery.

FOREIGN TRADE 1927-28 Rs. (in lakhs).	
Imports	(*a*) 281·66
Exports	(*b*) 870·30
COASTING TRADE 1927-28 Rs. (in lakhs).	
Imports	(*c*) 544·75
Exports	(*d*)135·84

Port Commissioners.—J. Izat, C.I.E., Chairman; H. R. Wilkinson, C.I.E., I.C.S., Vice Chairman; Commander C. R. Bluett, R.I.M., M.E. Rahman, B.A.; G. A. Wilby; A. McKean; J.A. Oliver; F. C. Gray; Lal Mohan Choudhury; Abdul Rahaman; Jatindra Nath Roy Choudhury; Abdul Haq Duvash.

Port Officer and Secretary to the Port Commissioners.—Commander C. R. Bluett, R.I.M.

Port Engineer.—F. J. Green, B.Sc., A.M.I.C.E., &c.

Vessels of 25 feet draught can be accommodated during the greater part of the year at four jetties which are fitted with modern equipment and capable of quick despatch.

Two additional jetty berths will shortly be constructed.

It is anticipated that considerable improvement in the depth of the navigable channel of the Karnafuli River will be effected by the new powerful dredger of 2,000 tons hopper capacity commissioned during the current year and new rivetment works shortly to be carried out.

VIZAGAPATAM HARBOUR PROJECT.

The question of creating a harbour at Vizagapatam to supply an outlet for a large area of fertile country adjacent to the East Coast of India, hitherto undeveloped, with considerable mineral resources and without suitable access to the outside world, was first formulated by the Bengal Nagpur Railway Company. That the creation of such a port would have a beneficial influence on this area was unquestioned, for it is pointed out that Vizagapatam, lying as it does in front of the only practicable gap in the barrier of the

Eastern Ghats, is formed by nature to be the outlet of the Central Provinces, from which a considerable amount of trade has taken this route in the past, even with the imperfect communications hitherto available. A necessary complement of the scheme is the construction of the proposed railway from Parvatipuram to Raipur which, with the existing coast line of the Bengal Nagpur Railway, would make a large and rich area tributary to the proposed port, and obviate the long and expensive circuit by Calcutta. A link would also be supplied in the most direct route to Rangoon from Europe by way of Bombay, while, from an imperial point of view, the possible provision of a fortified port on the long and almost unprotected stretch of coast between Colombo and Calcutta is held to be a consideration of great importance. The lofty projecting head-land of the Dolphin's Nose would, it is pointed out, offer facilities for this purpose as well as for protecting the entrance to the Port from the effects of south and south-westerly gales.

The Government of India have, with the approval of the Secretary of State and the Legislative Assembly, sanctioned the construction of the new railway line from Raipur to Parvatipur and the work is in progress. They have also decided to develop the port of Vizagapatam under their direct control and the port has accordingly been declared to be a major port.

The scheme for the construction and development of the Harbour will be carried out in sections. At present, the first section only has been sanctioned and consists of a wharf 1,500 feet long, capable of taking 3 or 4 steamers, according to their length, with moorings for two vessels in the harbour, *plus* accommodation at the oil jetty for 1 oil tanker or oil burning steamer. The wharf will afford a depth of 30 feet below low water ordinary spring tides and the entrance channel, through the creek to the harbour, will also be dredged to the same depth. In the first section also, goods facilities are provided for in the form of 2 large transit sheds with some 170,000 square feet of floor space, with necessary railway sidings and electric cranes, and passenger traffic is provided for by means of a dharamsala, a waiting-room and the necessary customs examination sheds. On the south side of the creek, away from the Harbour, an oil depot is also to be established where oil tankers can come alongside to fill storage tanks in the depot.

The estimated cost of the first section is about Rs. 240 lakhs and the time required to complete this will depend on the period that the dredging and reclamation work will take; but it is anticipated that it will be possible to berth ships in the new harbour in about 4 years' time.

The work is being carried out by a staff of Engineers under the direct charge of an Engineer-in-Chief, who comes under the administrative charge of the Agent, Bengal Nagpur Railway, who is *ex-officio* administrative officer for the development scheme. An advisory committee consisting of the above-mentioned officers and representatives of the Local Government, the Vizagapatam Port Administration and the commercial interests concerned, has also been constituted to advise in the development of the Harbour.

Good progress has been made with the initial portion of the development scheme. Most of the land has been acquired. A marine survey to investigate the sand travel and formation of the bar has been completed. Dredging of the inner Harbour by the Suction Dredger has been in progress since March 1928 and the construction of the Quay Wall is well advanced. Schemes for sewage and town planning have been prepared in consultation with the municipality and a malarial survey of the suburban area has been completed. Arrangements have also been made with the municipality for the supply of water to the Harbour area during construction.

In addition to the Suction Dredger, a Rock Breaker and Dipper Dredge is at work in the Entrance Channel removing the rock and hard overlay.

Education.

Indian education is unintelligible except through its history. Seen thus, it affords the spectacle of a growth which, while to one it will appear as a blunder based on an initial error easily avoided, to another it stands out as a symbol of sincerity and honest endeavour on the part of a far-sighted race of rulers whose aim has been to guide a people alien in sentiments and prejudices into the channels of thought and attitude best calculated to fit them for the needs of modern life and western ideals. There is to-day no subject in the whole area of administrative activity in India which presents greater complexities and differences of opinion than education. Government, local bodies and private persons of learning have in the past devoted their limited funds to meeting the demands of those who perceived the benefits of education, rather than to cultivating a desire for education where it did not exist. The result is that the structure has become top-heavy. The lower classes are largely illiterate, while the middle classes who constitute the bulk of the *intelligentsia* are in point of numbers at least educated to a pitch equal to that of countries whose economic conditions are more highly developed. As might be expected from this abnormal distribution of education, the form which it has eventually assumed contains corresponding defects. There have, however, in recent years been strong movements, leading to the passing of Primary Education Acts in several Provinces, in favour of the expansion of primary education among the masses.

The Introduction of Western Learning—In the early days of its dominion in India, the East India Company had little inclination for the doubtful experiment of introducing western learning into India. Warren Hastings, the dominating figure of the time, was a genuine admirer of the laws and literature of the East. His policy was to enable the ancient learning to revive and flourish under the protection of a stable government, and to interfere as little as possible with the habits and customs of the people. Even the Act of 1813 which set apart a lakh of rupees for the introduction and promotion of a knowledge of the sciences was interpreted as a scheme for the encouragement of Sanskrit and Arabic. In the following year the Court of Directors instructed the Governor-General to leave the Hindus "to the practice of usage, long established among them, of giving instruction in their own homes, and to encourage them in the exercise and cultivation of their talents by the stimulus of honorary marks of distinction and in some cases by grants of pecuniary assistance."

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Statement of Educational Progress in British INDIA.

	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
Area in square miles	1,091,229	1,092,61	1,092,638	1,091,347	1,901,454	1,091,333
Population { Male	126,902,120	126,917,953	126,919,836	126,914,196	127,044,953	127,044,953
Population { Female	120,195,531	120,185,934	120,187,505	120,183,310	120,288,470	120,288,470
Total Population	247,097,651	247,103,887	247,107,341	247,097,506	247,333,423	247,333,423
Public Institutions for Males.						
Number of arts colleges	152	160	156	193	196	213
Number of high schools*	2,040	2,082	2,187	2,294	2,396	2,444
Number of primary schools	137,435	139,095	144,430	150,919	157,350	162,666
Male Scholars in Public Institutions.						
In arts colleges	44,670	51,673	56,814	63,189	67,988	70,035
In high schools *	558,212	590,097	631,977	664,593	710,077	739,375
In primary schools	5,111,850	5,379,621	5,690,820	5,983,260	6,364,437	6,707,479
Percentage of male scholars in public institutions to male population.	5·04	5·36	5·71	6·05	6·5	6·9
Public Institutions for Females.						
Number of arts colleges †	15	14	14	18	19	19
Number of high schools*	208	230	237	236	238	243
Number of primary schools	22,635	22,920	23,583	24,677	25,814	26,682
Female Scholars in Public Institutions.						
In arts colleges †	1,263	1,487	1,622	1,807	1,881	1,933
In high schools*	36,698	40,652	44,170	47,390	51,560	54,826
In primary schools	1,198,550	1,220,495	1,264,814	1,321,002	1,434,639	1,549,281
Percentage of female scholars in public institutions to female population.	1·12	1·14	1·19	1·21	1·35	1·46
TOTAL SCHOLARS in public institutions. { Male	6,401,383	6,807,708	7,206,706	7,688,901	8,268,144	8,777,739
TOTAL SCHOLARS in public institutions. { Female	1,340,842	1,371,267	1,424,747	1,497,510	1,624,559	1,751,611
Total	7,742,225	8,178,975	8,674,003	9,186,411	9,892,703	10,529,350
TOTAL SCHOLARS (both male and female) in all institutions	8,381,350	8,791,090	9,316,694	9,797,344	10,514,321	11,157,496
Percentage of total scholars to population. { Male	5·49	5·80	6·15	6·47	6·93	7·33
Percentage of total scholars to population. { Female.	1·18	1·21	1·26	1·31	1·42	1·53
Total	3·39	3·48	3·77	3·96	4·25	4.51
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	9,02,30	9,36,67	9,74,76	9,98,02	1,088!58	11 93,33
From local funds	1,68,26	1,69,92	1,70,29	1,80,58	199,00	2,42,70
From municipal funds	79,05	81,62	86,54	92,68	127,38	1,23,21
Total Expenditure from public funds	11,49,61	11,88,21	12,31,59	12,71,28	1,414,96	15,59,24
From fees	3,30,09	3,93,51	4,33,54	4,68,63	492,66	5,21,27
From other sources	3,07,83	3,03,05	3,25,97	3,47,57	370.29	3,77,97
GRAND TOTAL OF EXPENDITURE	18,37,53	18,84,77§	19,91,11	20,87,48	2,277,92	24,58,48

* High schools include vernacular high schools also, in some provinces. ‡ *N. B.*—Owing to the reclassification adopted in the Revised Educational Tables the figure for 1922-23 are not strictly comparable with those of the preceding years. § This excludes expenditure on European Education in the United Provinces, Assam and the North-West Frontier Province. The total expenditure actually amounted to Rs. 19,04,04, 036.

† Includes Intermediate and Second Grade Colleges of the new type from 1922-23 onwards.

†† Includes scholars in University Departments and in the newly started Intermediate and Second Grade Colleges from 1922-23 onwards.

GROWTH AND ORGANISATION OF ENGLISH EDUCATION

An epoch in Indian educational history is marked by Sir Charles Wood's despatch in 1854. Perhaps its most notable feature was the emphasis which it laid on the importance of primary education. The old idea that the education imparted to the higher classes of society would filter down to the lower classes was discarded. The new policy was boldly "to combat the ignorance of the people which may be considered the greatest curse of the country." For this purpose Departments of Public Instructions were created on lines which do not differ very materially from the Departments of the present day. The despatch also broke away from the practice followed since 1835 whereby most of the available public funds had been expended upon a few Government schools and colleges, and instituted a policy of grants-in-aid to private institutions. "Such a system as this, placed in all its degrees under efficient inspection, beginning from the humblest elementary institution and ending with the university test of a liberal education would impart life and energy to education in India, and lead to a gradual but steady extension of its benefits to all classes of people." Another feature of the despatch was an outline of a university system which resulted in the foundation of the Universities of Calcutta, Madras and Bombay three years later. The affiliating type of university then became the pivot of the Indian education system. It has undoubtedly been of value in several ways. It enabled Government to select recruits for its service on an impartial basis : it did much, through the agency of its Colleges to develop backward places ; it accelerated the conversion of Indians to a zeal for western education ; and it cost little at a time when money was scarce. On the other hand, the new universities were not corporations of scholars, but corporations of administrators ; they did not deal directly with the training of men, but with the examination of candidates; they were not concerned with learning, except in so far as learning can be tested by examination. The colleges were fettered by examination requirements and by uniform courses; their teachers were denied that freedom which teachers should enjoy : and their students were encouraged not to value training for its own sake but as a means for obtaining marketable qualifications. In certain important respects the recommendations in the despatch were not followed. The Directors did not intend that university tests, as such, should become the sole tests qualifying for public posts; they also recommended the institution of civil service examinations. They did not desire the universities to be deprived of all teaching functions; they recommended the establishment of university chairs for advanced study. They were aware of the dangers of a too literary course of instruction ; they hoped that the system of education would rouse the people of India to develop the vast resources of their country ....and gradually, but certainly, confer upon them all the advantages which accompany the healthy increase of wealth and commerce. The encouragement of the grant-in-aid system was advocated to an even greater extent by the Education Commission of 1882, which favoured the policy of withdrawing higher education from the control of Government within certain limits and of stimulating private effort. In theory the decision was correct, but in practice it was irretrievably wrong. In its fatal desire to save money, Government deliberately accepted the mistaken belief that schools and colleges could be maintained on the low fees which the Indian parent could be expected to pay. And, in the course of time, an unworkable system of dual control grew up, whereby the Universities with no funds at their disposal were entrusted with the duty of granting recognition to schools and the Departments of Public Instruction were encouraged to cast a blind eye on the private institutions and to be content with the development of a few favoured Government institutions. There can be little wonder that, under such a system of neglect and short-sightedness, evils crept in which are now being removed gradually by the establishment of independent Boards of Intermediate Education charged with the administration of the high school and intermediate stages of education.

The Reforms of 1902-4.

In 1902, the Universities Commission was appointed by Lord Curzon's Government, and its investigation was followed by the Universities Act of 1904. The main object of the Act was to tighten up control, on the part of Government over the universities, and on the part of the universites over the schools and colleges. The Chancelors of the Universities were empowered to nominate 80 *per cent.* of the ordinary members of the Senates and to approve the election of the remainder : the Government retained the power of cancelling any appointment, and all university resolutions and proposals for the affiliation or disaffiliation of colleges were to be subject to Government sanction. The universities were given the responsibility of granting recognition to schools and of inspecting all schools and colleges, the inspection of schools being ordinarily conducted by the officers of the Department of Public Instruction. Permission was also given to the universities to undertake direct teaching functions and to make appointments, subject to Government sanction, for these objects: but their scope was in practice limited to post-graduate work and research. The territorial limits of each university were defined, so that universities were precluded from any connexion with institutions lying outside those boundaries. Neither the Commission nor the Government discussed the fundamental problems of university organisation, but dealt only with the immediate difficulties of the Indian system. They did not inquire whether the affiliating system could be replaced by any other mode of organisation, nor whether all schools might be placed under some public authority which would be representative of the universities and of the departments. They assumed the permanent validity of the existing system, in its main features, and set themselves only to improve and to strengthen it.

Recent Developments.

he passing of the Universities Act of 1904, there has been a considerable expansion of tional system. The two tables given below afford useful comparisons with previous years to illustrate the growth and expansion of education in India.

(*a*) STUDENTS.

Year.	In Recognised Institutions.			In All Institutions (Recognised and Unrecognised).		
	Males.	Girls.	Total.	Males.	Girls.	Total.
[illegible]	3,428,376	360,006	3,788,382	3,954,712	402,158	4,356,870
[illegible]	3,493,325	393,168	3,886,493	4,077,430	444,470	4,521,900
0[illegible]	4,164,832	579,648	4,744,480	4,743,604	645,028	5,388,632
11	5,253,065	875,660	6,128,725	5,828,182	952,539	6,780,721
15-	5,871,184	1,112,024	6,983,208	6,431,215	1,186,281	7,617,496
16-	6,050,840	1,156,468	7,207,308	6,621,527	1,230,419	7,851,946
17-	6,119,423	1,192,309	7,311,742	6,683,879	1,264,189	7,948,068
18–9	6,098,129	1,240,534	7,338,663	6,623,149	1,313,428	7,936,577
19–20	6,306,128	1,306,711	7,612,839	6,829,204	1,377,021	8,206,225
20-21	6,427,966	1,347,027	7,774,993	6,964,048	1,412,979	8,377,027
21-22	6,401,434	1,340,842	7,742,275	6,962,979	1,418,422	8,381,401
22-23	6,807,708	1,371,267	8,178,975	7,341,285	1,449,805	8,791,094
23–24	7,249,256	1,424,747	8,674,003	7,807,594	1,509,060	9,316,654
24–25	7,688,901	1,497,510	9,186,411	8,220,080	1,577,264	9,797,344
25-26	8,825,943	1,060,137	9,886,080	9,390,422	1,117,276	10,507,698
26-27	9,403,750	1,118,547	10,522,297	9,969,860	1,180,583	11,150,448

(*b*) EXPENDITURE.

Year.	Direct and Indirect on education in British India.	
	Public Funds.	Total.
	Rs.	Rs.
896–97	1,67,65,650	3,52,44,900
901–02	1,77,03,968	4,01,21,462
906–07	2,96,34,574	5,59,03,673
911–12	4,05,23,072	7,85,92,605
915–16	6,21,68,904	11,08,29,249
916–17	6,14,80,471	11,28,83,068
917–18	6,46,01,690	11,82,09,137
918–19	7,17,26,292	12,98,63,073
919–20	8,44,63,472	14,88,96,960
920-21	10,06,76,871	16,77,33,113
921-22	11,49,61,178	18,37,52,969
922-23	11,88,21,638	18,84,77,181
923–24	12,31,59,553	19,91,11,191
924-25	12,91,27,690	20,87,48,319
925–26	14,14,96,311	22,77,92,532
926-27	15,59,23,968	24,58,47,572

In 1926-27, the total expenditure on education in British India amounted to Rs. 24,58,47,572 of which 48·5 per cent. came from Government funds, 14·9 per cent. from Board funds, 21·2 per cent. from fees and 15·4 per cent. from other sources. In spite of this marked advance there is much lee-way to make up, as in the last census report the literate population of India was only 72 per thousand males and females per thousand 18.

The cost per scholar amounted to Rs. 22-0-7 as follows: to Govt. funds Rs. 10-11-2, to local funds Rs. 3-4-6, to fees Rs. 4-10-9 and to other sources Rs. 3-6-2.

The following table provides an interesting and valuable comment on the state of education in India 1921-22. Although the statistical returns show more than 8 millions of pupils at school it will be seen that over 76 per cent. of these are in the lower primary stage; and it may be safely deducted that over 50 per cent. of those at school never become literate. Of course, the total number of pupils at school is not a safe criterion of the state of education, and a sounder standard of comparison would be that number multiplied by the average period spent at school.

CLASSIFICATION OF PUPILS BY AGES AND STAGES OF INSTRUCTION IN 1921-22.

Ages.	Schools for General Education.											Ages.
	Infants.		I.	II.	III.	IV.	V.	VI.	VII.	VIII.	
	A.	B.									
1	2	3	4	5	6	7	8	9	10	11	1
Below 5 ..	128,385	20,498	32,226	61	11	..	..	..	..	..	Below 5
5 to 6 ..	354,263	269,377	124,716	4,443	306	5	6	..	..	..	5 to 6
6 to 7 ..	431,209	380,025	221,890	33,690	4,442	217	27	..	..	..	6 to 7
7 to 8 ..	312,055	377,747	274,991	97,137	25,029	2,647	218	1	..	..	7 to 8
8 to 9 ..	179,104	282,840	294,759	158,585	62,940	16,216	1,280	129	4	1	8 to 9
9 to 10 ..	99,068	164,760	231,126	18,458	101,859	40,831	8,858	639	70	6	9 to 10
10 to 11 ..	53,423	100,607	159,260	161,769	118,686	63,728	25,510	4,583	736	30	10 to 11
11 to 12 ..	26,920	54,508	97,066	118,716	111,018	75,065	42,614	17,100	3,735	361	11 to 12
12 to 13 ..	12,115	28,463	55,898	75,532	87,414	67,476	50,140	27,379	13,814	3,227	12 to 13
13 to 14 ..	5,879	14,814	28,366	42,612	56,843	50,555	44,658	31,354	21,264	10,531	13 to 14
14 to 15 ..	3,042	8,551	13,806	20,585	32,362	30,219	32,526	28,332	23,228	16,801	14 to 15
15 to 16 ..	2,121	5,332	6,978	9,600	16,971	16,419	20,832	21,378	20,296	16,221	15 to 16
16 to 17 ..	1,631	4,233	3,890	4,832	7,995	7,727	10,509	13,736	14,807	13,605	16 to 17
17 to 18 ..	1,596	3,288	2,671	2,386	3,369	3,222	5,207	7,582	8,543	8,272	17 to 18
18 to 19 ..	1,256	3,058	2,202	1,494	1,562	1,287	2,013	3,566	4,361	4,651	18 to 19
19 to 20 ..	1,176	2,598	2,108	1,233	742	559	765	1,577	1,834	1,995	19 to 20
Over 20 ..	2,822	6,163	3,883	2,500	1,025	502	449	773	1,107	983	Over 20
All Ages ..	1,616,065	1,726,662	1,555,915	923,093	635,604	376,675	245,612	158,129	113,799	76,684	All Ages.

CLASSIFICATION OF PUPILS BY AGES AND STAGES OF INSTRUCTION IN 1921-22.

Ages.	Schools for General Education.			Arts Colleges.								
	IX.	X.	Total.	1st year.	2nd year.	3rd year.	4th year.	5th year.	6th year or Post Graduate Class.	Total.	GRAND TOTAL.	Ages.
1	12	13	14	15	16	17	18	19	20	21	22	1
Below 5 ..	..	..	181,181	..	..	..	..	..	..	..	181,181	Below 5
5 to 6 ..	..	..	753,186	..	..	..	..	..	..	..	753,186	5 to 6
6 to 7 ..	..	..	1,071,500	..	..	..	..	..	..	..	1,071,500	6 to 7
7 to 8 ..	..	..	1,089,826	..	..	..	..	..	..	..	1,089,826	7 to 8
8 to 9 ..	..	..	995,857	..	..	..	..	..	..	..	995,857	8 to 9
9 to 10 ..	..	..	838,675	..	..	..	..	..	..	..	838,675	9 to 10
10 to 11 ..	2	..	688,343	..	..	..	..	..	..	..	688,343	10 to 11
11 to 12 ..	18	..	547,121	..	..	..	..	..	..	..	547,121	11 to 12
12 to 13 ..	173	10	421,671	..	..	..	..	..	..	..	421,671	12 to 13
13 to 14 ..	1,925	159	308,960	..	..	..	..	..	..	..	308,960	13 to 14
14 to 15 ..	8,559	1,791	219,602	..	..	..	..	..	..	..	219,602	14 to 15
15 to 16 ..	13,464	8,047	157,719	118	11	..	..	..	..	129	157,848	15 to 16
16 to 17 ..	13,259	13,606	109,830	1,846	234	2	..	..	..	2,082	111,912	16 to 17
17 to 18 ..	10,488	12,979	69,603	4,093	1,571	71	5	..	..	5,740	75,343	17 to 18
18 to 19 ..	6,632	10,585	42,667	3,585	3,547	904	125	..	..	8,161	50,828	18 to 19
19 to 20 ..	3,478	7,248	25,313	2,756	3,229	2,061	1,118	9	1	9,174	34,487	19 to 20
Over 20 ..	2,077	6,372	28,656	2,558	4,991	4,141	6,361	719	413	19,183	47,839	Over 20
All Ages ..	60,075	60,797	7,549,710	14,956	13,583	7,179	7,609	728	414	44,469	7,594,179	All Ages.

The following figures give the percentage to the population of scholars in British India during 1925-26 :—

Province.	In recognised Institutions.			In unrecognised Institutions.			In all Institutions.			Percentage of total scholars to population.	
	1926.	1925.	Increase or Decrease.	1926.	1925.	Increase or Decrease.	1926.	1925.	Increase or Decrease.	1926	1925.
Madras	2,266,390	2,110,269	+156,121	80,162	82,915	—2,753	2,346,552	2,193,184	+153,368	5·5	5·2
Bombay	1,037,061	972,916	64,145	37,039	*45,856	—8,817	1,074,100	1,018,772	+55,328	5·57	5·28
Bengal..	2,172,177	2,107,127	+65,050	49,835	43,815	+6,020	2,222,012	2,150,942	+71,070	4·75	4·60
United Provinces	1,221,420	1,125,183	+96,237	72,205	67,232	+4,973	1,293,625	1,192,415	+101,210	2·85	2·62
Punjab	975,517	835,267	+140,250	87,299	84,382	+2,917	1,162,816	919,649	+143,167	5·13	4·44
Burma..	411,398	364,029	+47,369	203,710	205,360	—1,650	615,108	569,389	+45,719	4·66	4·30
Bihar and Orissa	1,041,667	962,423	+79,244	42,712	37,264	+5,448	1,084,379	999,687	+84,692	3·18	2·93
Central Provinces ..	368,787	350,811	+17,976	9,196	11,342	—2,146	377,983	362,153	+15,830	2·72	2·60
Assam	260,256	244,413	+15,843	15,730	10,605	+5,125	275,986	255,018	+20,968	3·6	3·35
N.-W. Frontier Province..	58,416	54,568	+3,848	8,103	6,443	+1,660	66,519	61,011	+5,508	2·9	2·7
Coorg	8,841	8,337	+504	127	76	+ 51	8,968	8,413	+555	5·47	5·13
Delhi	21,906	20,175	+1,731	4,662	6,310	—1,648	26,568	26,485	+83	5·4	5·4
Ajmer-Merwara	12,026	11,162	+864	4,590	4,737	—147	16,616	15,899	+717	3·4	3·2
Baluchistan	5,453	5,207	+246	3,215	3,241	— 26	8,668	8,448	+220	2·06	1·8
Bangalore	12,856	12,355	+501	769	712	+ 57	13,625	13,067	+558	11·5	11·0
India ..	9,874,171	9,184,242	+689,929	619,354	610,290	+9,064	10,493,525	9,794,532	+698,993	4·25	3·97

s of institutions with the scholars in attendance at them are shown in the

	Institutions.		Scholars.	
	1926.	1927.	1926.	1927.
.. .. ..	13	14	6,623	7,053
.. .. ..	215	232	63,588	65,250
.. .. ..	75	77	17,378	17,616
.. .. ..	2,634	2,687	761,637	794,201
.. .. ..	8,203	8,651	954,510	1,059,866
.. .. ..	1,83,164	1,89,348	7,799,076	8,256,760
.. .. ..	8,806	10,039	289,891	328,604
ions	34,726	35,216	621,618	628,146
Total ..	2,37,836	2,46,264	10,514,321	11,157,496

on.—The primary schools he direction of the local ralities. In 1911, the late pleaded in the Imperial for a modified system of education, but Government ot the proposal mainly for n recent years, eight proave passed Primary Educag the introduction of comoy local option. Bombay matter by a private Bill nto law in February 1918. Bills which followed were Orissa passed in February ed in May 1919 and of the passed in June 1919. Of easures, the Punjab Act 1919, the Central Provinces e Madras Act in December m Act in 1925. The City ary Education Act of erally the provisions of the Bombay Corporation introduce free compulsory ward. Not content with gislature passed a new Act for compulsory elementary ake better provision for the ontrol of primary education esidency. The Bombay and nces Acts apply only to Bengal Primary Education Act instance, to municipalities, extension to rural areas. ded within the scope of the d Orissa and Bengal Acts, while the Central Provinces Act is capable of extension to girls, and the remaining Acts are applicable to both sexes. The United Provinces legislature passed a second Primary Education Act in 1926, *viz.*, the United Provinces District Boards Primary Education Act. It allows the District Boards to introduce compulsion within their areas. All the Acts are drafted on very similar lines. If a local body at a special meeting convened for the purpose decides by a two-thirds majority in favour of the introduction of compulsion in any part of the area under its control, it may then submit to Government, for approval, a scheme to give effect to its decision. The scheme must be within the means of the local body to carry out with reasonable financial assistance from Government. Ordinarily the age limits of compulsion are from six to ten years though provision is made for prolonging the period. Provision is also made in all the Acts for the exemption of particular classes and communities and for special exemption from attendance in cases of bodily infirmity. Walking distance to a school is generally defined as one mile from the child's home. The employment of children, who should be at school, is strictly forbidden and a small fine is imposed for non-compliance with an attendance order. The Acts generally provide that, subject to the sanction of the local Government, education where compulsory shall be free. Such in brief are the ordinary provisions of the various provincial Education Acts. Local bodies have not however shewn as yet any great alacrity in availing themselves of the opportunity afforded them by these Acts as is testified by the following table:—

	Date of Act.	Areas under "Compulsion."	
		Municipalities and Urban Areas.	District Boards and Rural Areas.
..	February 1918	..	..
	(For the City of Bombay only) 1920.	..	..
	February 1923	..	..
sa	February 1919	1	2
..	April 1919	42	451
..	May 1919	..	..
ces ..	June 1919 & 1926	23	..
ces ..	May 1920	3	65
..	December 1920	20	4
..	(Punjab Act applied) 1925 ..	In certain wards of the Delhi Municipality.	..

ove table does not include areas for which schemes of compulsory primary r consideration or have been sanctioned but not yet introduced. It includes, areas in which such schemes have been partially introduced.
chool areas.

Statement of Educational Progress in MADRAS.

	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
Area in square miles	142,260	142,260	142,260	142,260	142,260	142,260
Population { Male	20,870,749	20,870,749	20,870,749	20,870,749	20,870,749	20,870,749
Population { Female	21,448,236	21,448,236	21,448,236	21,448,236	21,448,236	21,448,236
Total Population	42,318,985	42,318,985	42,318,985	42,318,985	42,318,985	42,318,985
Public Institutions for Males.						
Number of arts colleges	47	51*	53	57	58	60
Number of high schools	292	303	310	324	337	342
Number of primary schools	33,635	35,113	37,718	40,353	43,640	46,389
Male Scholars in Public Institutions.						
In arts colleges	8,081	8,821	9,120	10,010	11,085	12,126
In high schools	124,382	127,423	129,203	131,854	133,882	133,094
In primary schools	1,199,500	1,277,484	1,379,153	1,475,246	1,587,962	1,714,501
Percentage of male scholars in public institutions to male population.	6·6	6·9	7·5	8·0	8·4	9·2
Public Institutions for Females.						
Number of arts colleges	4	4*	4	5	5	5
Number of high schools	51	53	55	56	56	56
Number of primary schools	2,640	2,785	2,872	2,988	3,243	3,399
Female Scholars in Public Institutions.						
In arts colleges	384	429	447	477	465	490
In high schools	10,320	10,981	11,859	12,004	12,556	13,340
In primary schools	347,285	366,163	392,539	423,190	462,998	501,206
Percentage of female scholars in public institutions to female population.	1·7	1·8	1·9	2·1	2·27	2·5
TOTAL SCHOLARS in public institutions { Male	1,378,159	1,460,333	1,565,615	1,664,220	1,779,728	1,915,177
TOTAL SCHOLARS in public institutions { Female	367,359	387,500	414,990	446,049	486,662	525,697
Total	1,745,518	1,847,833	1,890,605	2,110,269	2,266,390	2,440,874
TOTAL SCHOLARS (both male and female) in all institutions.	1,837,022	1,915,117	2,070,588	2,193,184	2,346,552	2,523,188
Percentage of total scholars to population. { Males	7·0	7·2	7·9	8·3	8·8	9·5
Percentage of total scholars to population. { Females	1·8	1·9	2·0	2·1	2·3	2·5
Total	4·3	4·5	4·9	5·2	5·5	6·0
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	1,58,26	1,55,10	1,67,13	1,71,39	1,87,52	2,02,44
From local funds	28,50	27,81	30,75	34,10	35,50	49,14
From municipal funds	7,18	8,26	9,92	12,24	12,89	17,14
Total expenditure from public funds	1,93,94	1,91,17	2,07,80	2,17,73	2,35,91	2,68,72
From fees	73,15	76,44	79,03	84,33	86,75	88,69
From other sources	72,89	78,16	83,17	88,33	93,54	95,31
GRAND TOTAL OF EXPENDITURE	3,39,98	3,45,77	3,70,00	3,90,39	4,16,20	4,52,72

* Includes Intermediate and 2nd grade Colleges of the new type.

The poverty of local bodies is usually the cause assigned to their diffidence to introduce compulsory education to any appreciable extent.

On the 31st March 1927, there were 1,89,348 recognised primary schools in British India containing 82,56,348 scholars. (The latter figure does not include scholars reading in the primary classes of secondary schools). The total direct expenditure on primary schools, during the year 1926-27, amounted to Rs. 6,95,21,696.

Secondary and High School Education. —The policy of Government is to maintain a small number of high schools which are to be regarded as models for private enterprise, and to aid private institutions. In 1911-12 there were 1,219 high schools for boys in India and in 1926-27 the number had risen to 2,687, the number of scholars in the former year being 390,881, and in the latter year 7,94,201. Some attempts have been made to give a greater bias towards a more practical form of instruction in these schools. The Commission of 1882 suggested that there should be two sides in secondary schools," one leading to the entrance examination of the universities, the other of a more practical character, intended to fit youths for commercial and other non-literary pursuits." Some years later, what were called B and C classes were started in some schools in Bengal, but, as they did not lead to a university course, they have not been successful. In more recent years, the Government of India have advocated the institution of a school *final* examination in which the more practical subjects may be included. Efforts have also been made to improve the conduct of the matriculation and to emphasise the importance of oral tests and of school records. In Madras, this examination, which was placed under the direction of a Board representative of the University and of Government, proved somewhat cumbrous and certain modifications were made. In the United Provinces, and the Central Provinces the control of secondary education has been made over to special Boards created for this purpose. Similary, the Administration of Delhi has established a Board of Secondary Education for that province. In the Punjab and in Bombay, the school leaving examination is conducted by Boards. But the main difficulty has not yet been touched. The University which recognises the schools has no money wherewith to improve them : and the Department of Public Instruction, which allots the Government grants, has no responsibility for the recognition of schools, and no connexion whatever with the private unaided schools. This dual authority and this division of responsibility have had unhappy effects. The standard of the schools also is very low so that the matriculates are often unable to benefit by the college courses. In some provinces an endeavour has been made to raise the standard of the schools by withdrawing from the University the Intermediate classes and by placing them in a number of the better schools in the State.

There are schools for Europeans and Anglo-Indians which are placed under the control of special inspectors for European Schools. The education of the domiciled community has proved to be a perplexing problem, and in 1912 a conference was summoned at Simla to consider the matter. The difficulty is that European Schools are very remote from the general system of education in India.

Medium of instruction in public schools —The position of English as a foreign language and as a medium of instruction in public schools was discussed by a representative conference which met at Simla in 1917 under the Chairmanship of Sir Sankaran Nair, the then Education Member. Although it was generally conceded that the teaching of school subjects through a medium which was imperfectly understood led to cramming and memorising of text-books, the use of English medium was defended by some on the ground that it improved the knowledge of English. The result of the conference was therefore inconclusive. Some local authorities have since then approved of schemes providing for the recognition of local vernaculars as media of instruction and examination in certain subjects.

Cadet Training—Provision has been made by the Government of India for the training of cadets for the mercantile marine service and a ship, "I.M.M.T.S. Dufferin" has been stationed for this purpose in Bombay waters.

Boy Scout Movement.—A happy development in recent years has been the spread of the boy scout movement in public schools.

Medical Inspection.—Arrangements have been made for medical inspection of scholars.

Intermediate Colleges.—One important part of the Calcutta University Commission's recommendations has been accepted by the Government of the United Provinces and the Government of India and incorporated in the Acts establishing the Lucknow, Dacca and Aligarh Muslim Universities, and reconstituting that of Allahabad, namely, the separation of the intermediate classes from the sphere of university work and of the two top classes of high schools from the rest of the school classes. The separated classes have been combined together and the control over them has been transferred from the University to a Board of Secondary and Intermediate Education. Such a Board was constituted for the Dacca University area by a notification of the Government of Bengal in 1921. It contains twenty-two members of whom seven are elected by the University. The United Provinces Board was constituted by an Act passed in the same year. It consists of some forty members of whom approximately one-quarter represent the Universities in the Province. The Intermediate Examination Board of the Aligarh Muslim University was brought into existence by an Ordinance framed in 1922. It is composed of eight members.

Professional and Technical Education. —There are 42 Medical Colleges and schools with 9,6 07 students, 15 Law Colleges and schools with 8,213 students, and 22 Agricultural Colleges and schools containing 1,336 students. A research institute in agriculture was started by Lord Curzon at Pusa in Bihar, which has done valuable work. Conferences have been held at Pusa, Simla and Poona, with the object of providing a suitable training in agriculture. A Royal Commission on Agriculture has submitted its report and its recommendations are under consideration There are twenty-one training colleges for secondary teachers in various parts of India with about 1,260, scholars and normal schools for the training of vernacular teachers. There are 152 commercial

Statement of Educational Progress in BOMBAY.

	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
Area in square miles	123,627	123,627	123,627	123,616	123,616	123,616
Population — Male	10,183,020	10,183,020	10,183,020	10,176,969	10,176,969	10,176,969
Population — Female	9,175,351	9,175,351	9,175,351	9,171,250	9,171,250	9,171,250
Total Population	19,358,371	19,358,371	19,358,271	19,348,219	19,348,219	19,348,219
Public Institutions for Males.						
Number of arts colleges	10	12	12	14	13	14
Number of high schools	143	145	160	167	177	187
Number of primary schools	11,170	10,972	11,132	11,434	11,963	12,313
Male Scholars in Public Institutions.						
In arts colleges	4,650	4,885	5,616	6,729	6,988	6,645
In high schools	47,366	48,957	53,880	57,848	62,340	67,449
In primary schools	637,423	645,959	668,487	685,911	732,145	787,170
Percentage of male scholars in public institutions to male population.	7·1	7·2	7·55	7.56	8.27	8.86
Public Institutions for Females.						
Number of arts colleges	..	..	..	....	....	....
Number of high schools	46	47	48	46	45	48
Number of primary schools	1,452	1,430	1,446	1,481	1,506	1,543
Female Scholars in Public Institutions.						
In arts colleges	179	219	280	363	395	382
In high schools	8,179	7,960	8,847	8,982	9,548	10,274
In primary schools	161,085	160,481	166,734	170,655	182,397	198,917
Percentage of female scholars in public institutions to female population.	1·9	1·9	1·91	2.02	2.15	2.35
TOTAL SCHOLARS in public institutions — Male	721,798	737,096	765,683	789,027	840,854	900,411
TOTAL SCHOLARS in public institutions — Female	175,079	174,556	181,368	186,058	198,587	215,859
Total	896,877	911,652	947,051	975,085	1,039,441	1,116,270
TOTAL SCHOLARS (both male and female) in all institutions.	958,392	973,760	10,05,800	1,021,584	1,077,030	1,151,428
Percentage of total scholars to Population. — Males	7·6	7·7	8·02	8.11	8.56	9.12
Percentage of total scholars to Population. — Females	2·0	2·0	2·11	2.14	2.25	2.43
Percentage of total scholars to Population. — Total	5·0	5·0	5·21	5.28	5.57	5.95
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	1,69,88	1,72,07	1,59,56	1,84,47	1,92,80	1,98,58
From local funds	11,52	14,78	10,25	12,48	12,85	19,77
From municipal funds	34,35	34,76	36,08	39,18	65,62	51,58
Total Expenditure from public funds	2,15,75	2,21,61	2,35,89	2,36,13	2,71,27	2,69,93
From fees	43,29	51,06	54,02	60,14	62,38	66,71
From other sources	36,99	39,13	38,12	43,59	43,75	45,99
GRAND TOTAL OF EXPENDITURE	2,96,03	3,11,80	3,28,03	3,39,86	3,77,40	3,82,63

colleges and schools with 8,221 scholars. The most important among them is the Sydenham College of Commerce in Bombay. Industrial institutions are dotted about India, some maintained by Government, others by municipalities or local boards, and others by private bodies. The most important are the Victoria Jubilee Technical Institute in Bombay. The Indian Institute of Science at Bangalore, the product of generous donations by the Tata family. The tendency in recent years has been to place these institutions under the control of the Departments of Industries. In addition to a number of engineering schools, there are Engineering Colleges at Roorkee, Sibpur, Poona, Madras, Rangoon, Patna and Benares each of which except that at Roorkee, is affiliated to a university. There are also a number of engineering schools. They had 3,644 scholars on their rolls on the 31st March 1927. The engineering colleges maintain a high standard and great pressure for admission is reported from several provinces. There are schools of art in the larger towns where not only architecture and the fine arts are studied, but also practical crafts like pottery and iron work. There are two forest colleges at Dehra Dun and Coimbatore with 129 scholars in all. A Technical Institute is in existence at Cawnpore and a Mining School at Dhanbad. Mining and metallurgy are also taught by the Mining and Metallurgical college at Benares which provides a 4-year course leading to a B. Sc. degree in each subject. There are three colleges for veterinary training containing 330 students.

Universities.

There are sixteen universities in India, namely :—

No.	University.	Dates of Acts.	Territorial jurisdiction.
1	CALCUTTA ..	.. 1857, 1904, 1905 & 1921.	Bengal and Assam and certain adjacent Indian States.
2	MADRAS ..	.. 1857, 1904, 1905 and 1923.	The Presidency of Madras excluding the Telugu country and Coorg and certain Indian States.
3	BOMBAY ..	.. 1857, 1904 & 1905 ..	The Presidency of Bombay and certain Indian States (Baroda, &c.).
4	PUNJAB ..	.. 1882, 1904 & 1905 ..	The Punjab, the North-West Frontier Province, Baluchistan and adjacent Indian States (Kashmir, Patiala, &c.).
5	ALLAHABAD ..	.. 1887, 1904, 1905 and 1921.	Allahabad.
6	BENARES HINDU	.. Oct. 1915	Benares District.
7	MYSORE ..	.. July 1916	Mysore State.
8	PATNA ..	.. Sept. 1917 and 1923..	Bihar & Orissa and adjacent Indian States.
9	OSMANIA ..	.. 1918	Hyderabad.
10	DACCA ..	.. April 1920	Radius of 5 miles.
11	ALIGARH MUSLIM	.. Sept. 1920	Radius of 10 miles.
12	RANGOON ..	.. Oct. 1920 and 1924 ..	Burma.
13	LUCKNOW ..	.. Nov. 1920	Local.
14	DELHI ..	.. March 1922	Delhi.
15	NAGPUR ..	.. June 1923	The Central Provinces and Berar.
16	ANDHRA * ..	.. Jan. 1926	The Telegu Country of the Madras Presidency.
17	AGRA ..	.. April, 1927	United Provinces (excluding the territorial jurisdictions of Allahabad, Benares, Aligarh and Lucknow Univercities), Rajputana and Central India.

* Actually established after 1925-26.

The foregoing statement mentions the universities incorporated by law for the time being in force. The first University in India, that of Calcutta, was founded in 1857. Between 1857 and 1887 four new Universities, at Bombay, Madras, Lahore and Allahabad were added. These five universities were all of the affiliating type. They consisted of groups of colleges, situated sometimes several hundred miles apart, and bound together by a legally constituted central organisation, which determined the qualifications for admission, prescribed the courses of study, conducted the examinations and exercised a mild form of control over the affiliated colleges. There was nothing under the system to limit the number of institutions affiliated to a University; and for thirty years, *i.e.*, from 1887 to 1917, the growing demand for

university education was met, not by the creation of new universities, but by enlarging the size of the constituent colleges and by increasing their number. By 1917 this inflation had been carried on so far that the composition of the original five universities stood as follows:—

University.	Colleges.	Scholars.
Calcutta	58	28,618
Bombay	17	8,001
Madras	53	10,216
Punjab	24	6,558
Allahabad	33	7,807

It had become obvious that further expansion on the same lines was no longer possible without a serious loss of efficiency and the Government of India had recognised in their resolution of 1913 the necessity of creating new local teaching and residential universities in addition to the existing affiliating universities. The development of this policy was accelerated by the strength of communal feeling and the growth of local and provincial patriotism, leading to the establishment of a number of teaching universities. The new type of universities has since been strongly advocated by the Calcutta University Commission which has offered constructive proposal as to the lines to be followed in university reform. A detailed account of the old and new Universities is given below.

The Universities of Calcutta, Bombay and the Punjab.—These three Universities alone still retain their old form, as measures for their reorganisation are still under consideration. On the 27th March 1921 an amending Act was passed by which the Governor-General ceased to be the Chancellor of the Calcutta University and now the head of the provincial government is the Chancellor of each of the older universities. The Vice-Chancellor is nominated by the Government concerned. The executive body is the Syndicate which is now organised so as to include a larger educational element. Over this body the Vice-Chancellor presides, all other members being elected by the Faculties, except the Director of Public Instruction who is a member *ex-officio*. The secretarial work is under the direction of the Registrar. The legislative body is the Senate which consists of from 75 to 100 members, 80 per cent. of whom are nominated by the Chancellor, the rest being elected by the Senate, or by its Faculties, or by the body of registered graduates. The Senate is divided into Faculties, which are in most cases those of arts, science, law, medicine, and engineering. There is an oriental faculty in the Punjab University alone. There are also Boards of Studies, whose duties are to recommend text-books or books which represent the standard of knowledge required in the various examinations. The newer universities differ considerably from the older universities in constitution.

Apart from the general tightening up of university control over its colleges, the chief feature of university development since the passing of the Act of 1904 has been participation by the universities in post-graduate teaching and research. In Madras a small number of university professors have been appointed; in the Punjab the services of a certain number of temporary professors from overseas have been engaged. In Bombay a certain number of college professors and others have delivered lectures to post-graduate students under the auspices of the University. But the most notable advance has been made in Calcutta, owing to the energy of the late Sir Asutosh Mookerjee and to the liberality of Sir Tarak Nath Palit and of Sir Rash Behari Ghosh. In 1916, a committee was appointed to investigate the matter. In accordance with its report, new regulations have been passed by the Senate, whereby all post-graduate teaching and research in arts and science in Calcutta is now conducted directly by the University, though many of the college teachers have been invited to take part in the work. Post-graduate councils in arts and science have also been constituted, which comprise all the teachers engaged in the work and a very small number of additional numbers appointed by the Senate.

The University of Madras.—This is one of the older universities. It has recently been reconstituted. The reconstituted University while functioning as teaching and residential University in so far as the city of Madras is concerned, continues to exercise its jurisdiction over its mofussil colleges which remain affiliated to it. The administration of the University is in the hands of a Senate which has been so constituted as to include both those who are educationists and those who are connected with the actual business and commercial life. A large elective element has been introduced in its composition. Government control over the details of administration has been decentralised. The affairs of the University are managed by the Senate through a body called the Syndicate, while the Academic Council, another new body, has charge of the academic matters. The affiliated colleges have been entrusted to the care of a new organisation called the Council of Affiliated Colleges. In accordance with the recommendations of the Calcutta University Commission, the Intermediate Examination Certificate has been made the admission test to the courses of the University. The Governor-General of India has been associated with the University as its Visitor with certain emergency powers. The Governor of Madras continues a Chancellor. The Vice-Chancellor is an elected whole-time officer.

The University of Allahabad.—This is another old University which has undergone reorganisation. In 1921 an Act was passed with a view to establishing a unitary, teaching and residential University at Allahabad while enabling the University to continue to exercise due control over the quality and character of the teaching given in its name by colleges affiliated to the University at Allahabad. The Agra University has now relieved it of its affiliating functions. The Governor-General is *Visitor*, and the Governor of the United Provinces *Chancellor*. The *Vice-Chancellor* is a whole-time officer. There is a *Court*, an *Executive Council*, an *Academic Council* a *Committee of Reference* dealing with expenditure only, a *Council of Associated Colleges*, &c.

The Mysore University was constituted under Regulation V of 1916, for the better encouragement and organisation of education in the State. His Highness the Maharaja is the Chancellor. The University is very similar in its constitution to the older Indian universities, having a Senate of not less than fifty and not more than sixty members; but, unlike the older universities, it gives seats on the Senate to the university professors *ex-officio.* It departs from existing practice by centralising university instruction in Mysore and Bangalore, and by conducting the work of the first year of the old college course in a few specially selected high schools. This University has been recognised by the Government of India as a University incorporated by law for the time being in force, that is to say, its examinations and degrees have been accorded the status of the corresponding examinations and degrees of a University incorporated by law in British India.

The Patna University.—Much thought has also been given to the evolution of a new type of university which will run abreast of the old. Patna university, which was constituted in 1917, is in most of its features a university of the old type, but certain innovations have been made. The Chancellor, who is the Governor of the province, may annul any proceeding of the University which is not in conformity with the Act and the Regulations. In the Senate the application of the elective principle has been extended, by increasing both the proportion of the elected Fellows and the categories of electing bodies; and the Senate includes representatives of the teaching staff and of the graduate teachers of recognised schools. Further, all colleges are given statutory representation on the Senate in the persons of their principals. The Syndicate is the ultimate authority in academic matters, subject to the proviso that any six of its members have the power to refer such matters to the Senate for review. The Vice-Chancellor is appointed by the local Government. In addition to other duties, he has the power to inspect all colleges of the University. The colleges affiliated to the University are of two kinds; colleges of the University whose buildings are situated within a specified area, and external colleges, whose buildings are situated in one of the four following towns: Muzuffarpur, Bhagalpur, Cuttack and Hazaribagh.

The Osmania University, Hyderabad.—The Osmania University was established under a Charter promulgated with a *Firman* of His Exalted Highness the Nizam, dated the 22nd September 1918. The fundamental principle underlying the working of the University is that Urdu forms the medium of education, although a knowledge of English as a language is compulsory in the case of all students. There is a Bureau of Translation attached to the University which produces text books required for college classes. The constitution of the University consists of a Council, a Senate, a Syndicate, Faculties and Boards of Studies. There is a Chancellor and a Vice-Chancellor, both *ex-officio* officers. The executive government of the University including general supervision and control over colleges is vested in the Council which is the highest authority and which performs the function assigned to Government in the case of British Indian Universities. The University possesses at present only one constituent college, *viz.*, the Osmania University College, which was opened in 1919. The Osmania University has been recognised by the Government of India as a University incorporated by law for the time being in force, that is to say its examination and degrees have been accorded the status of the corresponding examinations and degrees of a University established by law in British India.

The Hindu University, Benares.—The creation of the Hindu University, Benares, forms a landmark in the history of the Indian university system. The university is not designed to meet the needs of one province alone, but to draw students from all parts of India.

It has no monopoly, no privilege. Its energies are not diffused by the necessity of supervising distant colleges nor is its vitality impaired by the embarrassment of administrative duties other than those of organising its own teaching. It is therefore the first Indian university which is primarily a seat of learning and not an administrative organisation. Its constitution is therefore very different from those of the other Indian universities. A dividing line is made between administrative matters, entrusted to a large body called the Court, with an executive committee called the Council, and academy matters, entrusted primarily to a Senate, with an executive body called the Syndicate. The Court which is the supreme governing body besides its administrative powers, has the right to review the acts of the Senate, except where the Senate has acted in accordance with the Act, statutes and regulations. With a solitary exception it is composed entirely of Hindus. The senate has the entire charge of the organisation of instruction in the University and the colleges, the courses of study, and the examination and discipline of students, and the conferment of ordinary and honorary degrees. This university can recognise schools all over India.

The University of Dacca.—With the modification of the Partition of Bengal in 1911, Dacca ceased to be the capital of the separate province of Eastern Bengal and Assam. Shortly afterwards, the Government of India decided to establish a university of Dacca and the Government of Bengal appointed a committee to frame a scheme for the new University. The committee was instructed that the University should be of the teaching and residential and not of the federal type, and that it should be a self-contained organism unconnected with any colleges outside the limits of the city of Dacca. The committee which was presided over by the late Mr. R. (afterwards Sir Robert) Nathan presented its report later in the year. The report is of great value and in it certain new principles are enunciated. Great emphasis was attached to physical training and education and also to the tutorial guidance of the students. The University was to be very largely a State institution, and practically all its teachers and those of its colleges were to be Government servants. Though the colleges were to be separate units, each with its separate staff and buildings, they were to be linked together and with the University by a

Statement of Educational Progress in BENGAL.

	1921–22.	1922–23.	1923–24.	1924–25.	1925–26.	1926–27.
Area in square miles	76,843	76,843	86,543	76,843	76,843	76,843
Population — Male	24,151,222	24,151,222	24,151,222	24,151,222	24,151,222	24,151,222
Population — Female	22,544,314	22,544,314	22,544,314	22,544,314	22,544,314	22,544,314
Total Population	46,695,536	46,695,536	46,695,536	46,695,536	46,695,536	46,695,536
Public Institutions for Males.						
Number of arts colleges	33	36*	38	39	38	41
Number of high schools	887	896	918	958	997	1,003
Number of primary schools	35,621	35,375	36,583	37,079	37,134	38,197
Male Scholars in Public Institutions.						
In arts colleges	16,738	21,106	22,629	23,846	24,718	23,813
In high schools	193,751	202,625	211,208	219,694	233,221	238,648
In primary schools	1,112,812	1,139,900	1,206,358	1,260,130	1,281,312	1,345,094
Percentage of male scholars in public institutions to male population.	6·19	6·47	6·84	7·18	7·4	7·8
Public Institutions for Females.						
Number of arts colleges	3	4*	4	4	4	4
Number of high schools	25	37	37	38	39	42
Number of primary schools	12,162	12,313	12,842	13,371	13,789	14,612
Female Scholars in Public Institutions.						
In arts colleges	204	243	260	274	303	321
In high schools	4,582	6,872	7,160	7,818	8,218	9,234
In primary schools	323,094	325,207	340,044	355,294	369,243	396,410
Percentage of female scholars in public institutions to female population.	1·51	1·52	1·58	1·65	1·7	1·8
TOTAL SCHOLARS in public institutions — Male	1,496,439	1,564,612	1,702,679	1,734,116	1,783,548	1,873,461
TOTAL SCHOLARS in public institutions — Female	338,578	341,613	307,148	373,011	388,629	416,415
Total	1,835,017	1,906,225	2,009,827	2,107,127	2,172,177	2,289,876
TOTAL SCHOLARS (both male and female) in all institutions.	1,890,454	1,950,929	2,057,062	2,150,942	2,222,012	2,343,380
Percentage of total scholars to population. — Male	6·38	6·63	7·01	7·33	7·55	7·94
Percentage of total scholars to population. — Female	1·54	1·54	1·61	1·68	1·76	1·88
Total	4·05	4·18	4·40	4·60	4·75	5·02
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	1,35,45	1,31,63	1,30,10	1,33,83	1,43,64	1,47,95
From local funds	14,11	15,05	14,89	15,46	15,37	16,41
From municipal funds	2,43	3,33	3,30	3,06	3,93	6,34
Total Expenditure from public funds	1,51,99	1,50,01	1,48,29	1,52,35	1,62,94	1,70,70
From fees	1,28,34	1,28,42	1,40,16	1,46,36	1,55,21	1,62,20
From other sources	53,54	5,29	56,03	57,75	58,79	64,86
GRAND TOTAL OF EXPENDITURE	3,33,87	3,31,42	3,44,48	3,56,46	3,76,94	3,97,76

* Includes Intermediate and 2nd grade Colleges of the new type.

Name of University.	Tests.	Remarks.
7. MYSORE	The Entrance Examination of the Mysore University.	This is equivalent to the first year examination of an Indian University. Three years are spent for a degree
8 PATNA	The Matriculation Examination of the Patna University.	
9. OSMANIA	The Matriculation Examination of the Osmania University.	
10. ALIGARH MUSLIM ..	An Intermediate Examination.	
11. RANGOON..	The Anglo-Vernacular or English or European High School Examination.	This is approximately equivalent to the Matriculation Examination of an Indian University.
12. LUCKNOW	The Intermediate Examination of an Indian University.	
13. DACCA	Do.	
14. DELHI	The Matriculation Examination of an Indian University at present: ultimately an Intermediate Examination.	
15. NAGPUR	The Final Examination held under the Central Provinces High School Education Act, 1922.	Do.
16. ANDHRA	The School-leaving Certificate Examination.	
17. Agra	The Intermediate Examination of the United Provinces Board of High School and Intermediate Education.	

University Training Corps.—An interesting development in the corporate life of the Universities has been the foundation of University Corps attached to the Indian Defence Force. Such Corps are now in existence at the various University centres in British India.

Education of Indian Women and Girls.—The comparative statement below shows the state of women's education during 1925-26 :—

—	Institutions.			Scholars.		
	1923.	1926.	Increase or decrease.	1927.	1926.	Increase or decrease.
	1	2	3	4	5	6
For Females.						
Recognized institutions—						
Arts Colleges	19	19	..	1,254	1,231	+23
Professional Colleges	7	7	..	182	181	+1
High Schools	243	238	+5	49,757	46,982	+2,775
Middle Schools	722	732	—10	88,649	86,106	+2,543
Primary Schools	26,682	25,814	+868	966,214	914,290	+51,924
Special Schools	328	300	+28	12,491	11,347	+1,144
Unrecognized institutions	3,0888	2,696	+392	62,036	57,139	+4,897
Totals ..	31,089	29,806	+1,283	1,180,583	1,117,276	+63,307

close form of co-operation. The executive body, to be called the Council was to have very considerable powers, subject to the sanction of Government. The Council, which was to be a large and representative body, was to be the legislative authority, subject to the control of Government, and in other respects an advisory authority. The total cost of the full scheme was estimated at 53 lakhs, but deducting certain sums which were available from other sources the net cost was put down at nearly 40 lakhs, exclusive of recurring charges. These were expected to involve a net total of about 6½ lakhs annually. Before the scheme thus elaborated (which had received the Secretary of State's sanction) could be taken in hand, the war broke out. The Act constituting the University was passed in April 1920 and Mr. I. (now Sir) P. J. Hartog, C.I.E., was appointed the first Vice-Chancellor.

The Aligarh Muslim University.—It was the aim of Sir Syed Ahmed Khan years ago to place the benefits of a liberal education within the reach of the Muhammadan community; and in 1875 a school was opened which three years later was converted into the Muhammadan Anglo-Oriental College, Aligarh. The movement in favour of transforming this college into a teaching and residential university started, as early as the end of the last century. In 1911, during the visit of His Majesty the King-Emperor to India, His Highness the Aga Khan made an appeal which resulted in the collection of large subscriptions. A draft constitution was drawn up and a consultative committee was formed. But the draft constitution was not approved by the Secretary of State, and on the question of the right of affiliating colleges outside Aligarh in particular, there was a sharp difference of opinion. Government laid down, as in the case of the Hindu University, that the university should not have the power of affiliating Moslem institutions in other parts of India.

On October 15th, 1915, a meeting of the Moslem University Association was held at Aligarh, under the presidency of the Raja (now Maharaja) of Mahmudabad, when it was proposed that the meeting recommends the Moslem University Foundation Committee the acceptance of the Moslem University on the lines of the Hindu University. It was evident at the meeting that a large number of Indian Moslems were not prepared to accept a constitution for their university similar to that of the Hindu University.

In April, 1917, at a meeting of the Foundation Committee the following resolution was passed:—

"That this meeting of the Moslem University Foundation Committee hereby resolves with reference to the letter of the Government of India, Education Department, dated Delhi, 17th February 1917, D. O. No. 66, that the Committee is prepared to accept the best University on the lines of the Hindu University. It further authorises the Regulation Committee appointed at its Lucknow meeting, with the President and Honorary Secretary of the Moslem University Association as its *ex-officio* members, to take necessary steps in consultation with the Hon. the Education Member for the introduction of the Moslem University Bill in the Imperial Legislative Council."

The bill referred to above was ultimately introduced into the Council and was passed in September 1920. The Act came into force on December 1st, 1920.

The University of Rangoon.—Plans for a university in Burma had been under consideration for some years. After his arrival in Burma the then Lieutenant-Governor Sir Harcourt Butler thought that, on general grounds and with some reference to the needs of the province, the Rangoon University might usefully be of a more practical type than any yet attempted in India with courses in arts and science, pure and applied, technology, medicine, engineering, agriculture, law, forestry, veterinary, science and training, commerce and architecture. It might perhaps combine with university instruction practical studies at the Chief Court, the Pasteur Institute and the hospitals; and also at the Museum which the local Government was committed to build as soon as funds were available. It is possible in Burma to a greater extent than in any of the older and more advanced provinces in India to concentrate the intellectual energies of the province in one immediate neighbourhood and to develop a really many-sided university. An Act to establish a teaching and residential college at Rangoon was passed on the 24th October 1920. This Act however did not find favour with a section of Burmese and was consequently amended in 1923. The amending Act introduced greater popular and representative elements in the composition of the Council and invested the reformed Council with greater discretionary powers in matters affecting public interest, such as the question of admitting affiliation of *mofussil* colleges or of admitting more colleges to the status of constituent colleges. In short, it rendered the University more suited to the needs and aspirations of the province. The University authorities are the Chancellor, Vice-Chancellor, the Council (with an executive committee) and the Senate. The Council is the supreme administrative body while the Senate is an academic body with entire control of studies, examination and discipline. The Governor-General, as Visitor, has the right to cause inspection to be made.

The Lucknow University.—The foundation of this University may primarily be ascribed to the patriotism of the people of Oudh. It is a unitary teaching and residential University incorporated by an Act passed in 1920. The University authorities are (1) the Court, with powers of making statutes, (2) the Executive Council, which administers the property of the University and appoints examiners, (3) the Academic Council, which controls the teaching and advises the Executive Council on all academic matters, (4) a Committee of Reference (a Sub-Committee of the Court) deals with items of new expenditure only. The Governor-General, as Visitor, has the same power as in the case of the Rangoon University and other new, or reorganised, universities.

The Delhi University.—The Delhi University was created by an Act passed in 1922. The University depends for its existence mainly on the generosity of the Government of India who occupy the position of a local Govern-

Statement of Educational Progress in UNITED PROVINCES.

	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
Area in square miles	106,497	106,497	106,497	106,497	106,497	106,497
Population { Male	23,787,745	23,787,745	23,787,745	23,787,745	,787,745	23,787,745
Population { Female	21,588,042	21,588,042	21,588,042	21,588,042	21,588,042	21,588,042
TOTAL POPULATION	45,375,787	45,375,787	45,375,787	45,375,787	45,375,787	45,375,787
Public Institutions for Males.						
Number of arts colleges	21	33*	36	37*	37	40
Number of high schools	184	154†	162	162†	163	161
Number of primary schools	15,496	15,903	16,514	17,351	18,221	18,818
Male Scholars in Public Institutions.						
In arts colleges	5,449	5,925	7,166	8,040	9,089	9,513
In high schools	46,359	48,367	51,040	53,038	56,642	60,276
In primary schools	754,851	798,683	853,643	890,716	962,314	999,853
Percentage of male scholars in public institutions to male population	3·66	3·9	4·13	4·31	4·62	4·88
Public Institutions for Females.						
Number of arts colleges	5	5*	4	4*	5	5
Number of high schools	26	12†	28	28†	26	27
Number of primary schools	1,344	1,348	1,406	1,443	1,576	1,580
Female Scholars in Public Institutions.						
In arts colleges	73	73	87	102	118	133
In high schools	2,879	3,366	3,177	3,396	3,454	3,772
In primary schools	78,089	80,114	80,138	78,636	89,306	93,112
Percentage of female scholars in public institutions to female population	·43	·45	·46	·46	·51	0·55
TOTAL SCHOLARS in public institutions. { Males	871,750	920,274	959,591	1,026,089	1,110,477	1,161,233
TOTAL SCHOLARS in public institutions. { Females	93,309	96,568	98,158	99,094	110,943	119,215
TOTAL	965,059	1,016,842	1,057,749	1,125,183	1,221,420	1,280,450
TOTAL SCHOLARS (both male & female) in all institutions	1,029,565	1,080,951	1,150,762	1,192,415	1,293,625	1,349,401
Percentage of total scholars to population { Males	3·96	4·1	4·40	4·37	4·94	5·15
Percentage of total scholars to population { Females	·45	·47	·48	·43	·54	0·57
TOTAL	2·27	2·38	2·53	2·62	2·85	2·97
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	1,56,15	1,58,28	1,62,57	1,72,29	1,78,62	1,95,88
From local funds	34,82	33,57	30,81	27,16	30,78	32,57
From municipal funds	8,75	9,10	9,44	9,85	11,24	11,92
TOTAL Expenditure from public funds	1,99,72	2,00,95	2,02,82	2,09,31	2,20,64	2,40,37
From fees	35,59	29,33	38,94	42,14	43,23	46,49
From other sources	62,82	43,59	59,75	52,40	49,67	50,93
GRAND TOTAL OF EXPENDITURE	2,98,13	‡ 2,74,37	3,01,51	3,03,85	3,13,54	3,37,79

* Excludes "Arts and Science" departments of teaching universities, but includes Intermediate and 2nd Grade Colleges of the new type.
† Excludes "Intermediate" Colleges of new type.
‡ Excludes expenditure on European education.

ment in relation to it. It is a unitary teaching and residential University, designed on the model recommended by the Calcutta University Commission for the Dacca University, possessing at present three constituent colleges. The Act provides for two schemes—a provincial and a permanent one. Under the provisional scheme, which is in force at present, the constituent colleges remain with their hostels, etc., in their existing buildings. They also retain intermediate classes. But there have been instituted, so far as possible and desirable, common classes for graduate teaching. The matriculation examination of an Indian University, or an equivalent examination, is the admission test to the University courses. The permanent scheme contemplates that the existing colleges in Delhi City would become intermediate institutions and that degree classes would be conducted in new buildings to be built in Imperial Delhi. There would be halls and hostels where students would receive tutorial instruction. The Intermediate Examination of an Indian University or an equivalent examination, would become the admission test to the University. The Governor-General is the *ex-officio* Chancellor. There is a Pro-Chancellor, a Vice-Chancellor and a Rector. The principal governing bodies of the University are a Court, an Executive Council and an Academic Council.

The Nagpur University.—This University was created by an Act passed in 1923. Its constitution follows the recommendations of the Calcutta University Commission and the provisions in other University Acts in so far as they are applicable to local conditions. In particular the recommendations of the Calcutta University Commission have been adopted in the matter of the appointment of the Chancellor and the Vice-Chancellor, and of their powers and duties, the composition and functions of the Court, the Executive and Academic Councils, and the relations of the University with Government. The University Act provides in the first instance for a University of an examining and affiliating type in which the existence of the colleges is preserved as the unit of instruction both in the University centre of Nagpur and in other places which contain colleges admitted to the privileges of the University. The Act is so framed as to permit of a gradual development of the University into a managing and teaching body which may supplement, or entirely replace collegiate by University instruction either by taking over the management of existing colleges or by instituting and maintaining its own colleges.

Andhra University.—In January 1926, the Governor-General accorded his assent to an Act, passed by the Madras Legislative Council, incorporating a new University in the Madras Presidency. The new University is called the Andhra University and is of an affiliating type and all colleges located in the Telugu country, whether first or second grade, professional or technical, have become affiliated colleges. The university endeavours to develop scientific and technical education with special reference to the industries of the Telugu districts; it appoints its own teaching staff and will ultimately build, control and maintain colleges, laboratories and hostels of its own. The Act contemplates the possibility of a rapid development in the study of Telugu in the use of the vernacular as the medium of instruction and examination, and also aims at the ultimate establishment of more than one unitary and residential university in the Telugu districts. The headquarters of the university have been located at Bezwada.

Agra University.—This University was established and incorpoarted by the Agra University Act, 1926 (United Provinces Act No. VIII of 1928). It is a purely affiliating University and has relieved Allaahbad University of its "external side" its territorial jurisdiction embraces the United Provinces (excluding the territorial limits of the Allahabad, Benares Hindu, Aligarh Muslim and Lucknow Universities), Rajputana and Central India.

The following statement mentions the normal admission tests to the various Indian Universities:—

Name of University.	Tests.	Remarks.
1. CALCUTTA	The Matriculation Examination of the Calcutta University.	
2. MADRAS	The School-leaving Certificate Examination of Madras at present: ultimately an Intermediate Examination.	
3. BOMBAY	The School-leaving Examination of the Bombay Joint Examination Board or the Matriculation Examination of the Bombay University.	
4. PUNJAB	The Matriculation Examination of the Punjab University.	
5. ALLAHABAD	The Intermediate Examination of the United Provinces Board of High School and Intermediate Education.	
6. BENARES HINDU ..	The Admission Examination of the Benares Hindu University.	This is equivalent to the Matriculation Examination of an Indian University.

Name of University.	Tests.	Remarks.
7. MYSORE	The Entrance Examination of the Mysore University.	This is equivalent to the first year examination of an Indian University. Three years are spent for a degree
8 PATNA	The Matriculation Examination of the Patna University.	
9. OSMANIA	The Matriculation Examination of the Osmania University.	
10. ALIGARH MUSLIM ..	An Intermediate Examination.	
11. RANGOON..	The Anglo-Vernacular or English or European High School Examination.	This is approximately equivalent to the Matriculation Examination of an Indian University.
12. LUCKNOW	The Intermediate Examination of an Indian University.	
13. DACCA	Do.	
14. DELHI	The Matriculation Examination of an Indian University at present: ultimately an Intermediate Examination.	
15. NAGPUR	The Final Examination held under the Central Provinces High School Education Act, 1922.	Do.
16. ANDHRA	The School-leaving Certificate Examination.	
17. Agra	The Intermediate Examination of the United Provinces Board of High School and Intermediate Education.	

University Training Corps.—An interesting development in the corporate life of the Universities has been the foundation of University Corps attached to the Indian Defence Force. Such Corps are now in existence at the various University centres in British India.

Education of Indian Women and Girls.—The comparative statement below shows the state of women's education during 1925-26:—

—	Institutions.			Scholars.		
	1923.	1926.	Increase or decrease.	1927.	1926.	Increase or decrease.
	1	2	3	4	5	6
For Females.						
Recognized institutions—						
Arts Colleges	19	19	..	1,254	1,231	+23
Professional Colleges	7	7	..	182	181	+1
High Schools	243	238	+5	49,757	46,982	+2,775
Middle Schools	722	732	—10	88,649	86,106	+2,543
Primary Schools	26,682	25,814	+868	966,214	914,290	+51,924
Special Schools	328	300	+28	12,491	11,347	+1,144
Unrecognized institutions	3,0888	2,696	+392	62,036	57,139	+4,897
Totals ..	31,089	29,806	+1,283	1,180,583	1,117,276	+63,307

Statement of Educational Progress in the PUNJAB.

	1921–22.	1922–23.	1923–24.	1924–25.	1925–26.	1926–27.
Area in square miles	99,846	99,866	99,8 6	99,866	99,866	99,866
Population { Male	1,306,265	11,306,265	11,306 265	11,306,265	11,306,265	11,306,265
Population { Female	9,378,759	9,378,759	9,378 759	9,378,759	9,378,759	9,378,759
Total Population	20,685,024	20,685,024	20 685,024	20,685,024	20,685,021	20,685,024
Public Institutions for Males.						
Number of arts colleges	15	16	17	21	21	28
Number of high schools	203	215	237	254	285	301
Number of primary schools	5,627	5,738	5,679	5,562	5,714	5,912
Male Scholars in Public Institutions.						
In arts colleges	4,472	4,855	5,522	6,716	7,378	8,824
In high schools	75,872	83,554	95,914	101,987	111,244	114,961
In primary schools	270,153	349,063	350,293	352,005	375,483	338,534
Percentage of male scholars in public institutions to male population.	4·33	5·54	6·1	6·78	7·94	8·82
Public Institutions for Females.						
Number of arts colleges	1	2	2	2	2	2
Number of high schools	19	17	18	19	21	21
Number of primary schools	1,048	1,046	4,016	1,039	1,162	1,232
Female Scholars in Public Institutions.						
In arts colleges	36	72*	10	115	89	77
In high schools	2,870	2,248	2,345	2,571	3,438	3,543
In primary schools	48,184	52,345	51,579	52,405	57,825	66,124
Percentage of female scholars in public institutions to female population.	·67	·71	·69	·72	·82	0·80
TOTAL SCHOLARS in public institutions. { Male	439,755	625,916	635,203	766,285	897,905	996,570
TOTAL SCHOLARS in public institutions. { Female	62,867	66,855	65,392	68,982	77,612	89,517
Total	552,622	692,771	700,595	835,267	975,517	1,086,087
TOTAL SCHOLARS (both male and female) in all institutions.	626,690	77 ,978	841,906	919,649	1,062,816	1,082,736
Percentage of total scholars to population. { Male	4·77	6·04	6·6	7·28	8·44	9·32
Percentage of total scholars to population. { Female	·92	1·0	1·01	1·02	1·15	1·37
Total	3·03	3·75	4·07	4·44	5·13	5·72
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	86,78	1,13,36	1,13,16	1,18,34	1,33,05	1,51,17
From local funds	25,40	23,17	21,41	22,26	22,71	30,79
From municipal funds	9,76	9,57	9,11	9,26	10,26	10,53
Total Expenditure from public funds	1,21,94	1,46,10	1,43,68	1,49,86	1,66,02	1,92,49
From fees	39,12	44,12	44,17	52,87	51,99	57,52
From other sources	28,56	30,16	27,69	31,32	38,21	37,65
GRAND TOTAL OF EXPENDITURE	1,89,62	2,20,38	2,15,54	2,34,05	2,56,22	2,87,66

* Includes 33 pupils in high classes.

There is still a leeway to be made good. All the influences which operate against the spread of education amongst the boys are reinforced in the case of women by the *purdah* system and the custom of early marriage.

Arts colleges, medical colleges, and the like admit students of both sexes, and a few girls attend them. The Lady Hardinge Medical College for Women at Delhi gives a full medical course for medical students. The Shreemati Nathibai Damodher Thackersey Indian Women's University was started some nine years ago by Professor Karve. It is a private institution and is doing good pioneer work.

Education in the Army.—The Army in India undertakes the responsibility of the education of certain sections of the community. Its activities are directed into various channels with certain definite objects, which may be summarised as follows :—

(*i*) The education of the soldier, British and Indian, in order to :—

(*a*) develop his training faculties;

(*b*) improve him as a subject for military training and as a citizen of the Empire;

(*c*) enhance the prospects of remunerative employment on his return to civil life.

(*ii*) The fulfilment of the obligations of the State to the children of soldiers, serving and ex-service (British and Indian).

(*iii*) The provision, as far as possible, of training for the children of soldiers, who have died in the service of their country.

(*iv*) The creation of a body of Indian gentlemen educated according to English public school traditions, which should provide suitable candidates for admission to the Royal Military College, Sandhurst.

The Prince of Wales' Royal Indian Military College, Dehra Dun.—A royal Military College has been established at Dehra Dun. The aim of this institution is to provide education on the lines of an English public school for the sons of Indian gentlemen, both civil and military, up to the standard required for the passing of the entrance examination of the Royal Military College, Sandhurst.

Administration.—The educational services are divided into (*a*) the Indian Educational Service, (*b*) the Provincial Educational Service, (*c*) the Subordinate Educational Service.

(*a*) The Indian Educational Service which comprises officers performing inspection and tutorial work, is subdivided into two branches—one for men and the other for women. Appointments to both branches were originally made by the Secretary of State for India in Council, but since May 1924 recruitment has been suspended and no further appointments will be made to this service. Each local Government will find its own recruits. All officers belonging to this service come under the special leave and pension rules. Under the recommendations made by the Lee Commission, members of non-Asiatic domicile are entitled to four free passages, 1st class B., P. & O., during their service and to overseas pay in sterling.

(*i*) Indian Educational Service (Men's Branch).—There is a time-scale of pay rising from Rs. 400 by annual increments of Rs. 50 to Rs. 1,250 a month. There are two selection grades—one for 15 per cent. of the cadre on Rs.1,250-50-1,500 a month and the other for 5 per cent. on Rs.1,550-100-1,750 a month. Officers of non-Indian domicile receive overseas pay in addition ranging from Rs. 150 to Rs. 250 a month. The principals of first grade colleges receive duty allowances of Rs. 150 or Rs. 550 a month. Allowances of Rs. 150 a month are also granted to the Assistant Directors of Public Instruction and to other officers holding similar administrative appointments. There is one Director of Public Instruction in each province. The posts of Director are treated as prize posts for the members of the I.E.S. Their pay varies from Rs. 1,500-50-1,750 a month in the North-West Frontier Province to Rs. 2,500-100-3,000 in the Presidencies of Madras, Bombay and Bengal. In some provinces the Directors have been made *ex-officio* Secretary, Deputy Secretary or Under-Secretary, in the local Education Departments.

(*ii*) Indian Educational Service (Women's Branch).—The organisation and conditions of service are similar to those in the Men's Branch. The pay is Rs. 400-25-850 a month, with a selection grade of Rs. 900-25-950-50-1,050 a month for 20 per cent. of the cadre. In cases where the provincial cadre is very small, one member of the service is eligible for a selection grade post, irrespective of the percentage maximum. Officers of non-Indian domicile are in addition granted overseas pay ranging from Rs. 100 to Rs. 150 a month. The principals of first grade colleges for women and ladies holding such administrative posts as the Deputy Directresses of Public Instruction are eligible for a duty allowance of Rs. 100 a month.

(*iii*) Stoppage of Recruitment to the I.E.S.—As a result of the Report of the Royal Commission on the Superior Civil Services in India, 1924, further recruitment to the I.E.S. was stopped with effect from May 1924. Under the scheme of the organisation of the new superior educational services, all the existing posts in the Indian Educational Service will be merged into new provincial cadres which will contain special appointments not less in number than those in existence on the 9th March 1926 On the constitution by local Governments or their new superior services, on particular appointments will be reserved for members of the Indian Educational Service as at present.

(*b*) The Provincial Educational Service.—This service also consists of two branches, one intended for men and the other for women. The service comprises posts more or less similar to those borne on the cadre of the Indian Educational Service, but of secondary importance. Candidates are recruited in India by local Governments. They are invariably graduates of Indian universities and natives of the province concerned.

(*i*) Provincial Educational Service (Men's Branch).—The minimum and maximum pay has been fixed at Rs. 250 and Rs. 800 a month respectively, and local Governments have been empowered to settle grading within these limits.

(*ii*) **Provincial Educational Service (Women's Branch).**—The minimum pay is Rs. 200 a month and the maximum pay Rs. 500 a month. As in the case of the Men's Branch local Governments are competent to fix grading within these figures.

(*c*) **The Subordinate Educational Service**—This service is meant for posts of minor importance. Each province has its own rate of pay. For example, in the Punjab the maximum pay of S.E.S. officers is Rs. 250 a month.

Department of Education, Health and Lands of the Government of India—In 1910 a **Department of Education** was established in the Government of India with an office of its own and a Member to represent it in the Executive Council. The first Member was Sir Harcourt Butler. In 1923, the activities of the Department were widened, in the interests of economy, by absorption in it of the Department of Revenue and Agriculture. The enlarged Department has been designated the Department of Education, Health and Lands. Sir Muhammad Habibullah and Mr. G. S. Bajpai, I.C.S., are the present Member and Secretary, respectively. The Department possesses an educational adviser styled Educational Commissioner. The present Educational Commissioner is Mr. R. Littlehailes, C.I.E., M.A.

Calcutta University Commission.—The Report of the Calcutta University Commission was published in August 1919 and in the following January the Government of India issued a Resolution summarising the main features of the Report and the recommendations of the Commissioners.

The Government of India drew special attention to the following points in the Report:—

(*i*) High schools fail to give that breadth of training which the developments of the country and new avenues of employment demand.

(*ii*) The intermediate section of University education should be recognized as part of school education and should be separated from the University organisation.

(*iii*) The defects of the present system of affiliated colleges may be mitigated by the establishment of a strong central teaching body, the incorporation of unitary universities (as occasion arises), a modification of the administrative machinery which will admit of fuller representation of local interests, and supervision of different classes of institutions by several appropriately constituted bodies.

The Commission gave detailed suggestions for the reorganisation of the Calcuttta University, for the control of secondary and intermediate education in Bengal and for the establishment of a unitary teaching University in Dacca. These measures concerned only Bengal: but it was generally recognised that some of the criticism made by the Commissioners admit of a wider application. Committees were consequently appointed by the Universities of Madras, Bombay, Patna and the Punjab to consider the findings of the Commission. In the United Provinces two committees were appointed, one to prepare a scheme for a unitary teaching University at Lucknow, the second to consider measures for the reorganisation of the Allahabad University and the creation of a Board to control secondary and intermediate education

In Bengal the first outcome of the Commission's Report was the passing of the Dacca University Act in the Imperial Legislative Council in March 1920 mentioned in detail elsewhere. It is remarkable that the University which appears to have been least affected by the recommendations of the Calcutta University Commission has been the Calcutta University itself. In spite of many discussions and draft proposals by both the University and the Government the organisation of the Calcutta University has remained unaffected.

The Reforms Act.—The Reforms Act of 1919 has altered the conditions of educational administration in India. Education is now a 'transferred' subject in the Governors' provinces and is, in each such Province, under the charge of a Minister. There are, however, some exceptions to this new order of things. The education of Europeans is a 'Provincial reserved' subject, *i.e.*, it is not within the charge of the Minister of Education; and to the Government of India are still reserved matters relating to Universities like Aligarh, Benares and Delhi and all such new universities as may be declared by the Governor-General in Council to be central subjects. The Government of India are also in charge of the Chiefs' Colleges and of all institutions maintained by the Governor-General in Council for the benefit of members of His Majesty's Forces or of other public servants or of the children of such members or servants.

Chiefs' Colleges.—For the education of the sons and relatives of the Chiefs and Princes of India, whose families rule over one-third of the Indian continent, five Chiefs' Colleges are maintained, *viz.*—

(*i*) Mayo College, Ajmer, for Rajputana Chiefs;

(*ii*) Daly College, Indore, for Central India Chiefs;

(*iii*) Aitchison College, Lahore, for Punjab Chiefs;

(*iv*) Rajkumar College, Rajkote, for Kathiawar Chiefs; and

(*v*) Rajkumar College, Rajpur, for Central Provinces and Bihar and Orissa Chiefs.

In point of buildings, staffs and organisation these institutions approach English Public Schools. Students are prepared for a diploma examination conducted by the Government of India. The diploma is regarded as equivalent to the matriculation certificate of an Indian University. A further course of University standard called the Higher Diploma is conducted at the Mayo College. The examination for this Diploma is also held by the Government of India. Its standard is roughly equivalent to that of the B.A. diploma of an Indian University.

Inter-University Board.—The idea put forward by the Indian Universities Conference in May 1924 for the constitution of a central agency in India took practical shape and an Inter-University Board came into being during 1925. Twelve out of fifteen universities joined the Board. Its functions are :—

(*a*) to act as an inter-university organisation and a bureau of information ;

(*b*) to facilitate the exchange of professors ;

(*c*) to serve as an authorised channel of communication and facilitate the co-ordination of university work ;

(*d*) to assist Indian universities in obtaining recognition for their degrees, diplomas and examinations in other countries ;

(*e*) to appoint or recommend, where necessary, a common representative or representatives of India at Imperial or International conferences on higher education ;

(*f*) to act as an appointments bureau for Indian universities ;

(*g*) to fulfil such other duties as may be assigned to it from time to time by the Indian Universities.

Each member University has to make a fixed annual contribution towards the expenses of the Board.

The meetings of the Board are held yearly. The Board consists of one representative of each of the member Universities and one representative of the Government of India.

Indigenous Education.—Of the 11,157,496 scholars being educated in India 6,28,146 are classed as attending 'private' or 'un-recognised' institutions. Some of these institutions are of importance: The Gurukula near Hardwar and Sir Rabindra Nath Tagore's school at Bolpur have attained some fame, Mr. Gandhi's school at Ahmedabad has attracted attention and the numerous monastery schools of Burma are well-known. Connected with every big Mosque in northern India there is some educational organisation and the schools attached to the Fatehpuri and Golden Mosques at Delhi and the Dar-ul-Ulm, Deoband, are noted. These institutions generally have a religious or 'national' atmosphere and are possibly destined to play an important part in the future of India.

The Ayurvedic and Unani Tibbia College, Delhi, founded by the late Hakim Ajmal Khan, is an important unrecognised institution. It provides instruction in the indigenous system of medicine up to the highest standard and also gives some training in surgery.

Indian students in Foreign Countries.—Indian students still proceed to foreign countries, mainly, to Great Britain, America, Japan and Germany, to complete or supplement their education. It is difficult to estimate their number. But it would appear that there were in 1926-27 at least 1,644 Indian Students in Great Britain alone distributed as follows :—

	Institutions	No. of Students.
1.	Oxford	54
2.	Cambridge	113
3.	London	501
4.	Other English Universities and Welsh Universities	231
5.	Scottish Universities	261
6.	Belfast University	15
7.	Inns of Court	469
	Total ..	1,644

A report published by the Institute of International Education in December 1926 shows that during 1925-26 there were 170 Indians at various Universities and colleges in the United States of America. No information is however available regarding the number of Indian students in Japan or Germany.

Statement of Educational Progress in BURMA.

	1921–22.	1922–23.	1923–24.	1924–25.	1925–26.	1926–27.
Area in square miles	233,707	233,707	233,707	233,707	233,707	233,707
Population { Male	6,756,969	6,756,969	6,756,969	6,756,969	6,756,969	6,756,969
Population { Female	6,455,223	6,455,223	6,455,223	6,455,223	6,455,223	6,455,223
Total Population	13,212,192	13,212,192	13,212,192	13,212,192	13,212,192	13,212,192
Public Institutions for males.						
Number of arts colleges	2	2	1	1	1	1
Number of high schools (vernacular included)	80	90	117	142	149	149
Number of primary schools	4,374	3,977	3,561	3,400	3,584	3,913
Male Scholars in Public Institutions.						
In arts colleges	459	654	782	979	942	1,116
In high schools	16,774	20,220	26,716	32,216	34,507	36,114
In primary schools	127,193	117,199	106,576	104,156	117,913	136,046
Percentage of male scholars in public institutions to male population.	3·39	3·32	3·31	3·47	3·79	4·10
Public Institutions for Females.						
Number of arts colleges	....	....	....	....	....	....
Number of high schools	18	20	26	24	25	23
Number of primary schools	679	634	607	635	677	606
Female Scholars in Public Institutions.						
In arts colleges	56	87	89	103	121	133
In high schools	5,114	6,260	7,571	9,191	10,277	10,560
In primary schools	73,455	72,949	70,715	71,934	84,669	102,791
Percentage of female scholars in public institutions to female population.	1·81	1·87	1·88	2·002	2·27	2·57
TOTAL SCHOLARS in public institutions { Male	228,951	224,296	224,138	234,806	256,118	277,109
TOTAL SCHOLARS in public institutions { Female.	116,714	120,394	121,603	129,223	147,025	166,193
Total	345,665	344,690	345,741	364,029	403,143	443,302
TOTAL SCHOLARS (both male and female) in all institutions.	562,625	558,852	555,959	569,389	615,108	645,972
Percentage of total scholars to population. { Males	6·50	6·37	6·32	6·42	6·80	7·01
Percentage of total scholars to population. { Females.	1·91	1·99	1·84	2·09	2·41	2·66
Total	4·26	4·23	4·20	4·30	4·66	4·89
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	46,29	54,62	64,08	68,38	78,06	95,16
From local funds	(a) 15,09	16,11	17,85	15,12	17,47	25,42
From municipal funds	(b) 5,23	5,52	5,72	6,07	7,35	9,59
Total Expenditure from public funds	66,61	76,25	87,67	89,57	1,02,88	1,30,17
From fees	21,44	23,12	28,41	29,20	32,48	34,35
From other sources	13,60	17,13	19,35	26,74	31,83	29,32
GRAND TOTAL OF EXPENDITURE	1,01,65	1,16,50	1,35,41	1,45,51	1,67,19	1,93,84

(a) Includes Rs. 6,08,423 from Provincial Funds.

(b) Includes Rs. 1,20,823 from Provincial Funds.

Statement of Educational Progress in BIHAR and ORISSA

	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27
Area in square miles ..	83,282	83,282	83,286	83,286	83,286	83,165
Population .. { Male ..	16,763,866	16,763,866	16,765,163	16,765,163	16,765,163	16,765,163
{ Female ..	17,238,323	17,238,323	17,239,383	17,239,383	17,239,383	17,239,383
Total Population ..	34,002,189	34,002,189	34,004,546	34,004,546	34,004,546	34,004,546
Public Institutions for Males.						
Number of arts colleges ..	9	7	9	9	9	10
Number of high schools ..	119	122	125	123	130	135
Number of primary schools ..	22.448	23,084	24,186	26,560	27,689	27,457
Male Scholars in Public Institutions.						
In arts colleges ..	2,063	2,304	2,600	2,894	3,210	3,467
In high schools ..	24,642	27,557	30,043	30,918	35,103	38,210
In primary schools ..	586,610	622,548	679,616	759,435	819,155	830,495
Percentage of male scholars in public institutions to male population.	3·92	4·13	4·77	5·08	5·52	5·66
Public Institutions for Females.						
Number of arts colleges ..	1	1	1	1	1	1
Number of high schools ..	4	4	4	4	4	4
Number of primary schools ..	2,508	2,558	2,580	2,897	2,967	2,790
Female Scholars in Public Institutions.						
In arts colleges ..	12	10	8	10	9	7
In high schools ..	650	714	758	741		801
In primary schools ..	101,578	99,485	96,023	104,715	111,239	110,580
Percentage of female scholars in public institutions to female population.	·61	·60	·37	·63	·67	0·67
TOTAL SCHOLARS in public institutions. { Male ..	657,506	700,110	765,530	852,836	925,594	949,711
{ Female	105,771	103,926	100,661	109,587	116,073	115,785
Total ..	763,277	804,036	866,191	962,423	1,041,667	1,065,496
TOTAL SCHOLARS (both male and female) in all institutions.	810,382	444,026	907,780	999,787	1,084,379	1,108,494
Percentage of total scholars to population. { Male	4·19	4·4	5·01	5·29	5·75	5·9
{ Female ..	·62	·61	·39	·64	·69	0·69
Total ..	2·38	2·48	2·66	2·93	3·18	3·26
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues ..	(a) 49,19	(d) 44,83	46,72	49,92	57,84	72,30
From local funds ..	(b) 22,65	(e) 23,11	25,68	26,88	40,86	46,36
From municipal funds ..	(c) 1.75	(f) 1,85	2,24	22,31	2,98	3,17
Total Expenditure from public funds ..	73,59	69,79	74,64	84,80	1,01,68	1,21,83
From fees ..	22,33	23,40	25,80	26,88	29,53	32,65
From other sources ..	19,24	17,84	20,29	22,31	22,61	22,94
GRAND TOTAL OF EXPENDITURE ..	1,15,16	1,11,03	1,20,78	1,33,99	1,53,82	1,77.42

(a) Includes Rs. 1,01,000 and Rs. 6,000 paid by the Govts. of Bengal and Assam. (b) Includes Rs. 12,35,496 from Provincial Funds.
(c) Includes Rs. 1,03,311 from Provincial Funds. (d) Includes Rs. 73,406 and Rs. 4,963 and by the Govts. of Bengal and Assam respectively.
(e) Includes Rs, 12,72,472 from Govt. Funds and Rs. 1,128 paid by the District Board of Bengal. (f) Includes Rs. 96,897 from Govt. Funds.

Statement of Educational Progress in the CENTRAL PROVINCES and BERAR.

—	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
Area in square miles ..	99,623	99,876	99,876	99,876	99.876	99,876
Population .. { Male ..	6,951,399	6,951,399	6,951,399	6.951,399	6,951,399	6,951,399
Population .. { Female ..	6,961,361	6.961,361	6,961,361	6,961,361	6,961,361	6,961.361
Total Population..	13,912,760	13.912,760	13,312,760	13,912,760	13,912,760	13,912,760
Public Institutions for Males.						
Number of arts colleges ..	4	4	5	5	5	5
Number of high schools ..	43	42	42	43	45	49
Number of primary schools ..	3,987	3,942	3,956	3,974	4,096	4,189
Male Scholars in Public Institutions.						
In arts colleges ..	675	649	1,018	1,253	1,370	1,393
In high schools ..	3,019	3,391	3,854	4,272	4,650	4,895
In primary schools ..	228,327	225,303	231,577	235,258	246,178	256,946
Percentage of male scholars in public institutions to male population.	4·20	4·26	4·6	4·52	4·74	5·02
Public Institutions for Females.						
Number of arts colleges ..	....	....	....	....	....	....
Number of high schools ..	8	8	7	7	7	7
Number of primary schools ..	326	320	324	321	327	334
Female Scholars in Public Institutions.						
In arts colleges ..	2	4	4	9	13	17
In high schools ..	97	142	159	197	188	190
In primary schools ..	32,085	29,705	31,646	30,114	31,794	34,153
Percentage of female scholars in public institutions to female population.	·55	·51	·54	·53	·55	0·61
TOTAL SCHOLARS in public institutions. { Males ..	292,291	296,338	307,804	314,084	330,098	349,260
TOTAL SCHOLARS in public institutions. { Females ..	38,390	35,792	37,643	36,727	38,689	42,363
Total ..	330,681	332,130	345,447	350,811	368,787	391,623
TOTAL SCHOLARS (both male and female) in all institutions.	333,303	340,050	353,140	362,153	377,983	399,289
Percentage of total scholars to population. { Males ..	4·23	4·36	4·7	4·67	4·86	5·11
Percentage of total scholars to population. { Females .	·56	·53	·55	·54	·57	0·62
Total ..	2·39	2·44	2·53	2·60	2·72	2·86
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues ..	51,23	55,78	53,02	50,06	58,37	71,73
From local funds ..	10,32	10,07	12,60	14,98	16,22	13,54
From municipal funds ..	5,67	5,51	6,93	6,73	7,35	7,38
Total Expenditure from public funds ..	67,22	71,36	72,55	71,77	81,94	92,65
From fees ..	6,47	6,88	8,61	11,09	11,46	11,82
From other sources ..	7,58	7,59	7,20	7,54	9'32	9,17
GRAND TOTAL OF EXPENDITURE ..	81,27	85,83	88,36	90,40	1,02,72	1,13,64

Statement of Educational Progress in ASSAM.

—	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
Area in square miles ..	53,015	53,015	53,015	53,015	53,015	53,015
Population .. { Male ..	3,961,109	3,961,109	3,961,109	3,961,109	3,961,109	3,961,109
Population .. { Female ..	3,645,121	3,645,121	3,645,121	3,645,121	3,645,121	3,645,121
TOTAL POPULATION ..	7,606,230	7,606,230	7,606,230	7,706,230	7,606,230	7,606,230
Public Institutions for Males.						
Number of arts colleges ..	3	3	3	3	3	3
Number of high schools ..	41	40	42	43	44	45
Number of primary schools ..	3,955	4,019	4,120	4,221	4,277	4,377
Male Scholars in Public Institutions.						
In arts colleges ..	767	943	1,027	1,109	1,144	1,036
In high schools ..	11,153	11,997	12,675	13,475	14,648	15,350
In primary schools ..	145,967	156,290	166,750	169,266	179,022	183,650
Percentage of male scholars in public institutions to male population ..	4·57	4·9	5·25	5·39	5·73	5·9
Public Institutions for Females.						
Number of arts colleges ..	....	....	....	....	....	....
Number of high schools ..	3	3	3	4	5	5
Number of primary schools ..	343	352	366	376	397	409
Female Scholars in Public Institutions.						
In arts colleges ..	....	....	....	....	....	4
In high schools ..	576	544	577	798	983	1,012
In primary schools ..	23,184	24,050	25,292	26,803	28,664	30,025
Percentage of female scholars in public institutions to female population ..	·73	·75	·88	·85	·91	0·95
TOTAL SCHOLARS in public institutions { Male ..	181,206	194,260	208,123	213,504	227,072	235,742
TOTAL SCHOLARS in public institutions { Female .	26,808	27,622	29,230	30,909	33,184	34,691
TOTAL ..	208,014	221,882	237,353	244,413	260,256	270,433
TOTAL SCHOLARS (both male and female) in all institutions.	216,218	229,776	246,826	255,018	275,986	288,620
Percentage of total scholars to populations. { Male ..	4·7	5·07	5·46	5·57	6·1	6·3
Percentage of total scholars to populations. { Female .	·76	·78	·83	·89	·95	1·0
TOTAL ..	2·84	3·02	3·2	3·35	3·6	3·7
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues ..	21,85	23,74	22,36	22,62	23,50	25,21
From local funds ..	3,86	4,45	4,38	4,45	4,60	5,04
From municipal funds ..	38	38	42	41	45	58
TOTAL Expenditure from public funds ..	26,09	28,57	27,16	27,48	28,55	30,83
From fees ..	5,48	4,16	6,37	6,39	6,79	7,44
From other sources ..	3,27	3,10	3,70	42	5,19	5,57
GRAND TOTAL OF EXPENDITURE	34,84	35,83	37,23	38,16	40,53	43,84

Statement of Educational Progress in COORG.

	1921–22.	1922–23.	1923–24.	1924–25.	1925–26.	1926–27.
Area in square miles	1,582	1,582	1,532	1,582	1,582	1,582
Population .. Male	89,501	89,501	89,501	89,501	89,501	89,501
Population .. Female	74,337	74,337	74,337	74,337	74,337	74,337
TOTAL POPULATION	162,838	163,838	163,838	173,838	163,838	163,838
Public Institutions for Males.						
Number of arts colleges	....	....	....	....	....	....
Number of high schools	2	2	2	2	2	2
Number of primary schools	99	97	98	98	99	99
Male Scholars in Public Institutions.						
In arts colleges	....	....	....	....	....	....
In high schools	662	670	716	782	812	717
In primary schools	5,449	5,124	5,217	5,048	5,123	5,546
Percentage of male scholars in public institutions to male population.	6·86	6·48	6·62	6·51	6·64	7·01
Public Institutions for Females.						
Number of arts colleges	....	....	....	....	....	....
Number of high schools	....	1	1	1	1	1
Number of primary schools	10	9	9	9	9	9
Female Scholars in Public Institutions.						
In arts colleges	....	....	....	....	....	....
In high schools	26	178	192	219	233	221
In primary schools	2,260	2,175	2,280	2,288	2,663	2,427
Percentage of female scholars in public institutions to female population.	3·26	3·17	3·32	3·37	3·89	3·56
TOTAL SCHOLARS in public institutions. Male	6,138	5,798	5,933	5,830	5,945	6,273
TOTAL SCHOLARS in public institutions. Female	2,426	2,357	2,472	2,507	2,896	2,648
Total	8,564	8,155	8,405	8,337	8,841	8,921
TOTAL SCHOLARS (both male and female) in all institutions.	8,715	8,454	8,773	8,413	8,968	9,115
Percentage of total scholars to population. Male	6·99	6·75	6·95	6·58	6·77	7·23
Percentage of total scholars to population. Female	3·31	3·24	3·42	3·39	3·92	3·56
Total	5·32	5·16	5·35	5·13	5·47	5·56
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	94	1,05	93	94	1,24	1,25
From local funds	18	32	40	40	42	43
From municipal funds	3	4	3	2	3	4
Total Expenditure from public funds	1,15	1,41	1,36	1,36	1,69	1,72
From fees	19	44	41	39	44	44
From other sources	9	8	8	8	8	9
GRAND TOTAL OF EXPENDITURE	1,43	1,93	1,85	1,83	2,21	2,25

Statement of Educational Progress in the NORTH-WEST FRONTIER PROVINCE.

	1921–22.	1922–23.	1923–24.	1924–25.	1925–26.	1926–27.
Area in square miles ..	13,419	13,193	13,193	13,193	13,193	13,193
Population .. { Male ..	1,229,316	1,229,316	1,229,316	1,229,316	1,229,316	1,229,316
{ Female ..	1,022,026	1,022,026	1,022,026	1,022,026	1,022,026	1,002,026
Total Population ..	2,251,342	2,251,342	2,251,342	2,251,342	2,251,342	2,251,342
Public Institutions for Males.						
Number of arts college ..	3	3	3	3	3	3
Number of high schools ..	20	20	20	23	25	25
Number of primary schools ..	625	505	500	497	498	547
Male Scholars in Public Institutions						
In arts colleges ..	193	269	308	373	401	408
In high schools ..	6,762	7,439	7,708	8,881	9,258	9,764
In primary schools ..	25,989	24,969	24,022	26,575	28,293	30,875
Percentage of male scholars in public institutions to male population.	3·6	3·7	3·7	3·9	4·22	4·6
Public Institutions for Females						
Number of arts colleges ..	..	..	..	..	..	..
Number of high schools ..	..	..	..	..	..	..
Number of primary schools ..	63	60	60	58	68	70
Female Scholars in Public Institutions.						
In arts colleges ..	..	..	..	..	..	..
In high schools ..	..	..	1	2	1	..
In primary schools ..	3,821	3,647	3,893	3,512	4,270	4,637
Percentage of female scholars in public institutions to female population.	·4	·5	·5	·5	·63	0·7
TOTAL SCHOLARS in public institutions. { Male ..	44,748	45,051	45,018	49,108	51,896	56,276
{ Female .	4,647	5,107	5,172	5,460	6,520	6,800
Total ..	49,395	50,158	50,190	54,568	58,416	63,076
TOTAL SCHOLARS (both male and female) in all institutions.	53,914	56,403	57,897	61,011	66,519	69,718
Percentage of total scholars to population { Males ..	3·9	4·1	4·2	4·5	4·9	5·0
{ Females.	·5	·5	·6	·6	·6	0·7
Total ..	2.3	2·5	2·6	2·7	2·9	3.0
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues ..	(a) 11,79	1,131	10,47	10,77	11,57	13,56
From local funds ..	1,01	94	58	86	1,11	1,24
From municipal funds ..	1,49	1,24	1,44	1,39	1,42	1,55
Total Expenditure from public funds ..	14,29	13,49	12,49	13,02	14,10	16,35
From fees ..	1,17	1,39	1,62	1,58	1,89	1·98
From other sources ..	1,93	3,22	2,49	2,90	2,41	2,44
GRAND TOTAL OF EXPENDITURE ..	17,39	18,01	16,60	7,50	18,40	20,77

(a) Includes an expenditure of Rs. 50,000 from Imperial Funds.

Statement of Educational Progress in DELHI.

	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
Area in square miles	575	593	593	593	593
Population .. Male	281,047	281,633	281,633	281,633	281,633
Population .. Female	206,044	206,555	206,555	206,555	206,555
TOTAL POPULATION ..	487,091	488,188	488,188	488,188	488,188
Public Institutions for Males.					
Number of arts colleges	3	3	5	5	5
Number of high schools	10	12	11	11	12
Number of primary schools	117	131	131	133	148
Male Scholars in Public Institutions.					
In arts colleges	705	848	1,015	1,068	1,104
In high schools	3,042	3,552	3,512	3,731	4,225
In primary schools	5,434	6,847	7,067	7,801	8,940
Percentage of male scholars in public institutions to male population ..	4·8	5·4	6·0	6·59	7·1
Public Institutions for Females.					
Number of arts colleges	..	..	1	1	1
Number of high schools	3	3	2	2	2
Number of primary schools	20	21	24	25	33
Female Scholars in Public Institutions.					
In arts colleges	33	35	42	44	44
In high schools	488	497	497	565	522
In primary schools	760	740	1,176	1,432	2,368
Percentage of female scholars in public institutions to female population ..	1·2	1·2	1·5	1·61	2·1
TOTAL SCHOLARS in public institutions .. .. Male ..	13,420	15,180	17,119	18,563	20,081
TOTAL SCHOLARS in public institutions .. .. Female .	2,523	2,570	3,056	3,343	4,485
TOTAL ..	15,943	17,750	20,175	21,906	24,566
TOTAL SCHOLARS (both male and female in all institutions)	20,563	23,721	26,485	26,568	26,825
Percentage of total scholars to population. Male ..	6·2	7·1	7·9	8·1	7·7
Percentage of total scholars to population. Female..	1·5	1·7	1·9	1·7	2·4
Total ..	4·2	4·8	5·4	5·4	5·5
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	6,45	7,28	7,30	7,08	7,59
From local funds..	20	23	39	34	43
From Municipal funds	1,14	1,12	1,29	1,59	1,90
TOTAL EXPENDITURE from public funds.	7,79	8,63	8,93	9,01	9,92
From fees	1,77	2,02	2,66	2,63	2,88
From other sources	6,24	3,92	5,58	5,12	4,26
GRAND TOTAL OF EXPENDITURE ..	15,80	14,57	17,22	16,76	17,06

Statement of Educational Progress in AJMER-MERWARA.

	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
Area in square miles	2,711	2,711	2,711	2,711	2,711	2,711
Population — Male	269,566	269,566	296,566	269,566	269,566	269,566
Population — Female	225,705	225,705	225,705	225,705	225,705	225,705
TOTAL POPULATION	495,271	495,271	495,271	495,271	495,271	495,271
Public Institutions for Males.						
Number of arts colleges	1	1	1	1	1	1
Number of high schools	8	8	9	9	9	9
Number of primary schools	134	131	138	143	146	147
Male Scholars in Public Institutions.						
In arts colleges	69	95	101	112	131	125
In high schools	2,026	2,147	2,329	3,321	2,533	2,712
In primary schools	5,778	5,980	6,551	6,271	6,597	6,643
PERCENTAGE OF MALE SCHOLARS in public institutions to male population.	3·3	3·46	3·6	3·2	3·85	3·92
Public Institutions for Females.						
Number of arts colleges	....	....	....	....	....	....
Number of high schools	1	1	1	1	1	1
Number of primary schools	15	12	9	9	12	9
Female Scholars in Public Institutions.						
In arts colleges	....	....	....	....	....	....
In high schools	153	165	173	170	144	151
In primary schools	707	630	551	466	652	477
PERCENTAGE OF FEMALE SCHOLARS in public institutions to female population.	·5	·56	·58	·61	·72	0·72
TOTAL SCHOLARS in public institutions. — Male	8,901	9,343	9,802	9,832	10,381	10,651
TOTAL SCHOLARS in public institutions. — Female	1,346	1,277	1,324	1,330	1,645	1,622
TOTAL SCHOLARS in public institutions. — TOTAL	10,247	10,620	11,126	11,162	12,026	12,273
TOTAL SCHOLARS (both male and female) in all institutions	15,126	15,653	16,223	15,899	16,616	17,264
Percentage of total scholars to population. — Male	4·7	4·94	5·1	5·0	5·2	5,22
Percentage of total scholars to population. — Female	1·06	1·03	1·1	·98	1·1	1·0
Percentage of total scholars to population. — TOTAL	3·05	3·18	3·3	3·2	3·4	3·3
Expenditure (in thousands of rupees.)	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	3,95	3,11	2,37	2,54	2,70	2,85
From local funds	20	16	17	16	19	26
From municipal funds	42	32	26	23	23	19
TOTAL EXPENDITURE FROM PUBLIC FUNDS	4,57	3,59	2,80	2,93	3,12	3,30
From fees	66	79	1,09	1,22	1,36	1,47
From other sources	1,18	99	1,76	1,47	1,62	1,56
GRAND TOTAL OF EXPENDITURE	6,41	5,37	5,65	5,62	6,10	6,33

Statement of E

	1921-22.
Area in square miles	54,228
Population — Male	239,181
Population — Female	175,231
TOTAL POPULATION	414,412
Public Institutions for Males.	
Number of arts colleges	....
Number of high schools	3
Number of primary schools	66
Male scholars in Public Institutions.	
In arts colleges	....
In high schools	1,165
In primary schools	3,464.
PERCENTAGE OF MALE SCHOLARS in public institutions to male population.	1·4
Public Institutions for Females.	
Number of arts colleges	....
Number of high schools	....
Number of primary schools	4
Female Scholars in Public Institutions.	
In arts colleges	....
In high schools	28
In primary schools	676
PERCENTAGE OF FEMALE SCHOLARS in public institutions to female population	·39
TOTAL SCHOLARS in public institutions. — Male	3,473
TOTAL SCHOLARS in public institutions. — Female	676
TOTAL SCHOLARS in public institutions. — TOTAL	4,149
TOTAL SCHOLARS (both male and female) in all institutions.	7,112
Percentage of total scholars to population — Male	2·5
Percentage of total scholars to population — Female	·52
Percentage of total scholars to population — TOTAL	1·7
Expenditure (in thousands of rupees.)	Rs.
From provincial revenues	2,23
From local funds	18
From municipal funds	18
TOTAL EXPENDITURE FROM PUBLIC FUNDS	2,59
From fees	19
From other sources	29
GRAND TOTAL OF EXPENDITURE	3,07

*Excludes expenditur

Statement of Educ

	1921–22.
Area in square miles	13½
Population — Male	61,165
Population — Female	57,458
TOTAL POPULATION	118,623
Public Institutions for Males.	
Number of arts colleges	1
Number of high schools	5
Number of primary schools	66
Male scholars in Public Institutions.	
In arts colleges	473
In high schools	1,468
In primary schools	4,729
PERCENTAGE OF MALE SCHOLARS in public institutions to male population	12·7
Public Institutions for Females.	
Number of arts colleges	1
Number of high schools	4
Number of primary schools	20
Female Scholars in Public Institutions.	
In arts colleges	317
In high schools	751
In primary schools	2,412
PERCENTAGE OF FEMALE SCHOLARS in public institutions to female population	7·7
TOTAL SCHOLARS in public institutions — Male	7,717
TOTAL SCHOLARS in public institutions — Female	4,437
TOTAL SCHOLARS in public institutions — TOTAL	12,154
TOTAL SCHOLARS (both male and female) in all institutions	12,307
Percentage of total scholars to population. — Male	2·7
Percentage of total scholars to population. — Female	7·9
Percentage of total scholars to population. — TOTAL	10·4
Expenditure (in thousands of rupees.)	Rs.
From provincial revenues	2,50½
From local funds	....
From municipal funds	30½
TOTAL EXPENDITURE FROM PUBLIC FUNDS	2,81
From fees	1,07
From other sources	2,00
GRAND TOTAL OF EXPENDITURE	85

lucational Progress in BALUCHISTAN.

1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
54,228	54,228	54,228	54,288	54,288
255,014	255,014	255,014	255,014	255,014
165,634	165,634	165,234	165,634	165,634
420,648	420,648	420,648	420,648	420,648
....	....	....	....	....
3	3	3	4	4
66	67	57	68	71
....	....	....	....	....
1,206	4,262	1,628	1,545	1,508
1,721	1,799	1,773	1,929	1,819
1·5	1·67	1·71	1·78	1·8
....	....	....	....	....
....	....	....	....	....
5	4	4	3	3
....	....	....	....	....
138	40	52	14	19
291	205	165	189	195
·40	43	·50	·53	0·53
3,884	4,167	4,372	4,563	4,603
675	822	835	890	870
4,559	4,989	5,107	5,453	5,473
7,180	7,825	8,448	8,668	8,795
2·46	2·7	2·1	3·03	2·9
·54	·4	·52	0·56	0·8
1·71	1·9	2·0	2·06	2·09
Rs.	Rs.	Rs.	Rs.	Rs.
2,10	2,01	2,06	2,48	2,45
18	27	20	25	70
22	21	23	34	32
2,50	2,49	2,49	3,07	3,47
25	48	37	74	75
39	38	33	82	57
3,14	3,35	3,19*	4,63	4,79

e on European schools.

ational Progress in BANGALORE.

1922-23.	1923-24.	1924-25.	1925-26	1926-27.
13½	13½	13½	13·54	13,54
61,165	61,165	61,576	61,576	61,576
57,458	57,458	57,364	57,364	57,364
118,623	118,623	118,940	118,940	118,940
1	1	1	1	1
4	5	5	5	5
50	47	49	49	48
452	77	113	115	170
1,496	1,877	1,967	2,112	2,179
3,964	3,933	4,403	4,413	4,595
11·4	11·8	12·6	12·79	13·5
1	1	1	1	1
4	4	4	4	4
21	21	22	24	24
317	311	312	310	309
734	814	755	758	764
2,493	2,435	2,649	2,882	3,030
7·8	7·5	8·06	8·69	8·8
6,977	6,961	7,673	7,870	8,179
4,502	4,549	4,682	4,986	5,206
11,479	11,510	12,355	12,856	13,385
12,398	12,392	13,067	13,625	14,332
12·7	13·05	13·5	13·8	14·8
8·1	7·7	8·3	8·9	9·1
10·5	10·5	11·0	11·5	12·0
Rs.	Rs.	Rs.	Rs.	Rs.
3,22	3,09	3,02	3,08	3,12
....	....	....	....	....
40	32	35	31	36
3,62	3,32	3,37	3,39	3,48
1,50	2,41	2,60	2,55	2,69
2,45	2,05	2,01	1,95	2,13
7,57	7,78	[illegible]	7,89	8,30

The Co-operative Movement.

The Need.—More than seventy per cent. of the vast population of India subsist on agriculture and the majority of these millions generally live, under present conditions, from hand to mouth. The ryot's occupation is healthy and productive, and he is proverbially honest and straightforward in his dealings, except when years of famine and hardship make him at times crafty and recalcitrant. Owing to his poverty, combined with want of education and consequent lack of foresight, he has to incur heavy debts to meet occasional expenses for current seasonal purposes, the improvement of his land, or for ceremonial objects, and he has therefore to seek the assistance of the local money-lender, known as the Sowkar or the Mahajan. The rates of interest on such advances, though varying from province to province and even in different parts of a province, are generally very high. In addition to charging excessive rates, the Sowkar extorts money under various pretexts and often takes from the needy borrower bonds for amounts in excess of those actually advanced. One of the chief causes of the ryot's poverty is, that owing to the absence of security and his short-sightedness due to want of education, he did not as a rule collect and lay by his savings but frittered away his small earnings in extravagant and unproductive expenditure, on the purchase of trinkets and ornaments, and on marriage and other ceremonies. Tradition says that he hoarded coins under the ground with the likelihood that on his death the money was lost to his family for good. This absence of thrift and the habit of dependence, in case of difficulty, on the Government or on the Sowkar are the bane of his life. There is besides a general absence of ideals or desire for progress. A co-operative society changes all this, inasmuch as it provides him with a suitable institution in which to lay by his savings and teaches him the valuable lesson of self-help through the sense of responsibility he feels in being its member. Thus the chronic poverty and indebtedness of the Indian agriculturist afford a very good field for the introduction of co-operative methods, especially as his work is of a productive character likely to enable him to earn a better living under circumstances more favourable than they are at present.

Genesis of the Movement.—The question of improving rural credit by the establishment of agricultural banks was first taken up in the early nineties when Sir W. Wedderburn, with the assistance of the late Mr. Justice N. G. Ranade, prepared a scheme of agricultural banks which was approved of by Lord Ripon's Government but was not sanctioned by the Secretary of State. The matter was not again taken up until about fifteen years later when Lord Wenlock's Government in Madras deputed Mr. F. A. (now Sir Frederick) Nicholson, to report on the advisability of starting agricultural or land banks in the Presidency for the financing of the agricultural industry. There was in existence in Madras an indigenous system of banking available for persons of small means. This institution, called the Nidhi, corresponded in some respects to the provident funds and friendly societies in European countries. Though these Nidhis provided cheap capital to agriculturists the spirit of co-operation was lacking in them. Sir Frederick submitted an exhaustive report to Government suggesting that the formation of co-operative societies afforded an excellent means for relieving rural indebtedness. Unfortunately, the report was not received favourably either by the non-official public or by the Government of Madras, and no action was taken on the recommendations made in it. The next few years saw two of the worst famines from which India had ever suffered, and in 1901 Lord Curzon appointed a Commission to report on the measures to be adopted in future to protect the ryot from the ravages of famines and to relieve distress. The Commission laid stress on the proper working of the Agriculturists' Loans and the Land Improvement Loans Acts under which *takavi* advances are made by Government to cultivators. This system was given a long trial in the years previous to the great famines as well as during the years succeeding the 1899-1900 famines. But it is acknowledged on all hands that the system has not been successful in solving the problem of rural stagnation, as it is clear that it is not facility for obtaining cheap capital alone which will raise the agriculturist and relieve him from his debts, but the provision of capital combined with the inculcation of habits of thrift and self-help. This Commission also recommended that the principal means of resisting famines was by strengthening the moral backbone of the agriculturist and it expressed the view that the introduction of co-operation in rural areas might be useful in securing this end.

Co-operative Credit Societies Act.—These recommendations induced Lord Curzon to appoint a Committee with Sir Edward Law at its head to investigate the question and a report was submitted to Government recommending that co-operative societies were worthy of every encouragement and of a prolonged trial. Sir Anthony (now Lord) Macdonell and others were at the same time making experiments on similar lines in the United Provinces and the Punjab with satisfactory results. All these activities, however, took an organized shape only when Lord Curzon's Government introduced in the Imperial Legislative Council a Bill to provide for the constitution and control of co-operative credit societies. The main provisions of the Bill which became the Co-operative Credit Societies' Act (Act X of 1904) were:—

(1) That any ten persons living in the same village or town or belonging to the same class or caste might be registered as a co-operative society for the encouragement of thrift and self-help among the members.

(2) The main business of a society was to raise funds by deposits from members and loans from non-members, Government and other co-operative societies, and to distribute the money thus obtained in loans to members, or with the special permission of the Registrar, to other co-operative credit societies.

(3) The organization and control of co-operative credit societies in every Presidency were put under the charge of a special Government officer called the Registrar of Co-operative Credit Societies.

(4) The accounts of every society were to be audited by the Registrar or by a member of his staff free of charge.

(5) The liability of a member of a rural society was to be unlimited.

(6) No dividends were to be paid from the profits of a rural society but the profits were to be carried at the end of the year to the reserve fund, although when this fund had grown beyond certain limits fixed under the bye-laws, a bonus might be distributed to the members.

(7) In urban societies no dividend was payable until one-fourth of the profits in a year were carried to the reserve fund.

Soon after the passing of the Act, the local Governments in all the Presidencies and major provinces appointed Registrars with full powers to organise, register and supervise societies. In the early stages o the working of this Act, Government loans were freely given, and the response to the organising work of the Registrars was gradual and steady throughout most parts of the country.

Co-operative Societies Act.—As co-operation progressed in the country, defects were noticed in the Co-operative Credit Societies Act and these were brought to the attention of Government by the Conferences of the Registrars which were for some years held annually. In two directions the need for improved legislation was especially felt. In the first place, the success of credit societies had led to the introduction of co-operative societies for distribution and for purposes other than credit for which no legislative protection could be secured under the then existing law. And, secondly, the need for a free supply of capital and for an improved system of supervision had led to the formation of various central agencies to finance and supervise primary credit societies and these central agencies ran all the risks attendant on a status unprotected by legislation The Government of India recognising the desirability for removing these defects, decided to amend the old Act, and a Bill embodying the essential alterations proposed was introduced in the Imperial Legislative Council and after a few amendments it emerged from the Council as the Co-operative Societies Act (II of 1912) replacing Act X of 1904. The outstanding features of the new Act were as under:—

(*a*) It authorised the formation of societies for purposes other than credit, which was possible under the old Act only with the special permission of the Local Government. (This extension of co-operation to purposes other than credit marks an important stage in its development in India.)

(*b*) It defined, in precise terms, the objects for which co-operative societies could be organised.

(*c*) It removed the arbitrary division of societies into rural and urban and substituted a more scientific division in accordance with the form of liability adopted.

(*d*) It facilitated the growth of central agencies by insisting on limited liability, by means of a special clause about the registration of a society one of whose members is a registered society.

(*e*) It empowered Local Governments to frame rules and alter bye-laws so as to put restrictions on the dividends to be declared by societies and allowed to societies with unlimited liability the discretion to sanction distribution of profits to their members according to principles laid down by the Local Governments.

(*f*) It allowed societies with the permission of the Registrar to contribute from their net profits, after the reserve fund was provided for amounts up to 10 per cent. of their remaining profits to any charitable purpose as defined in the Charitable Endowments Act. (This kept the movement in touch with local life by permitting societies to lend assistance to local educational and charitable institutions.)

(*g*) It prohibited the use of the word "co-operative" as part of the title of any business concern except a registered society.

Composition of the Capital of Agricultural Societies.—On the organization of agricultural credit was necessarily concentrated the attention of the promoters, for it presented a far more important and far more difficult problem than urban credit. There was a great variety of types among the agricultural societies started in different provinces, and some Registrars adopted the "Raiffeisen," and some the "Luzzatti" methods in their entirety. The commonest type, as prevailing in the Punjab, Burma, and the United Provinces,—and now extended practically all over India—is the unlimited liability society with a small fee for membership and a share capital, the share payments to be made in annual instalments. In some places, the bye-laws insist on compulsory deposits from members before entitling them to enjoy the full privileges of membership. The system in Bombay and some parts of the Central Provinces is different, there being no share-capital but only an admission fee. Part of the working capital is raised by deposits from members and other local sympathisers, but the bulk of it in all provinces is obtained by loans from central and other co-operative societies. In all the Provinces, the Government set apart in the initial stages every year a certain sum to be advanced as loans to newly started co-operative societies, usually up to an amount equal to the deposits from members, raised by a society. State aid in the form of direct money doles to agricultural credit societies has now become an exception rather than the rule, and this withdrawal in no way hampers the development of the movement on account of the rapid increase of co-operative financing agencies and the growth of public confidence in the primary societies. Out of a total working capital of 27 crores, 23 crores were shares, 4 crores reserves, 1½ crores deposits of members, 1½ crore deposits from non-members and societies and 17 crores loans from central societies. In Bombay, since 1923, Government placed at the disposal of the Provincial Bank an allotment for distribution as advances to agriculturists under the Land Improvement Loans Act, such advances to be made through the primary

societies and the central banks to which these are affiliated.

Constitution of Agricultural Credit Societies.—The typical agricultural credit society in India corresponds to the "Raiffeiser society," the management being gratuitous, the profits indivisible, and the area of work limited. In the Punjab, the United Provinces and Burma where shares form an integral part of the system, the distribution as dividend of a portion of the profits after ten years' working is permitted under certain restrictions, although in the Punjab the tendency now is to make the profits wholly indivisible and the shares non-withdrawable. In several parts of the country there are villages where a few literate agriculturists may be found, but many of these are hardly fit enough to undertake the responsible work of a secretary, being practically ignorant of account keeping. In such villages either the village school-master or the village accountant is appointed secretary. In some places, where a suitable person is not available on the low pay a single society can afford, neighbouring societies are grouped together with a whole-time, well paid secretary. In the Central Provinces, especally and to a certain extent in Bihar and Orissa, Bengal and the United Provinces, the accounts are written up by group secretaries, clerks or Moharrirs, controlled more or less by the inspecting staff of central banks to which societies are affiliated. As the work of societies develops, the need for trained secretaries is being felt more keenly, for it is now realized that the function of a secretary does not consist merely in writing the accounts correctly. With a view to meet the demand for trained secretaries, training classes have been organized in Bombay, in the Punjab, in Burma and elsewhere during the last few years, and efforts have been made to provide education in co-operation through the new educational and propagandist associations which have been started in some of the major provinces. Arrangements have also been devised in some provinces to educate the members of managing committees in the principles of the movement through peripatetic instructors and courses of simple lectures are delivered at central villages, wherein existing Unions have been utilized to promote such co-operative education among rural workers.

Internal Management of Societies.—The managing committee of a society consists of five to nine members, the chairman being usually one of the leading persons in the village. The daily work is carried on by the secretary, but the managing committee supervises this and has alone the power to admit new members, to receive deposits, to arrange for outside loans, to grant loans to members and to take notice of defaulters. The practice is now growing of fixing the normal credit of every member once or twice in the year at a general meeting and the committee can sanction loans only within the limits so fixed. The accounts of the society are kept by the secretary and the necessary forms, papers, and books are usually supplied from the Registrar's office or the central organizations referred to above to simplify the work of the secretary. The books are kept according to the rules framed by the Local Governments and are open to inspection by important local officials and the Registrar and his staff. The accounts are audited, at least once a year, by the auditors working under the Registrars of Co-operative Societies, and the societies are inspected from time to time by honorary or paid inspectors. In Burma and Madras, the supervision is carried out by unions, while in the United Provinces, Bihar and Orissa, Ajmere-Merwara and Bengal the responsibility for supervision rests mainly with the central banks. In the Central Provinces, the inspection is controlled by the Provincial Federation working through the central banks. In Bombay, supervision is conducted partly by unions, partly by central banks and partly by honorary organizers. In the Punjab, while paid for by societies, the inspecting staff works under the direct orders of the Provincial Union with the Registrar as its president

The supreme seat of authority in co-operative societies is the entire body of members assembled in general meetings at which every member has one vote and one only. At the annual general meeting held at the close at the co-operative year the accounts are submitted, the balance-sheet passed, and the managing committees with the chairmen and secretaries are elected. The general meeting fixes in some provinces the borrowing limit of individual members, lays down the maximum amount up to which the managing committee may borrow during the ensuing year, dismisses members for misconduct or serious default, and settles the rates of interest for loans and deposits. All the net profits of a society are annually carried to the reserve fund, which is indivisible, that is, incapable of distribution as dividend or bonus, which cannot be drawn upon without the sanction of the Registrar, and which must be invested in such a manner as the rules framed under the Act may prescribe. It is intended to meet unforeseen losses and to serve as an asset or security in borrowings. Except in the Central Provinces and Madras, and to some extent in a few other provinces, the reserve funds of primary societies are generally utilised as an addition to their working capital, unless they have considerable outside deposits and have to make special arrangements in respect of fluid resource to cover such borrowings.

Main defects.—The main defects of primary societies may be summarized. The most prominents is the evil of unpunctuality. The percentage of over dues to total outstandings was a little over 20 for all the provinces and States, but was as high as 30 in some provinces. These arrears are due more to easy going ways of life and the narrowness of margin between income and expenditure than to recalcitrancy. Next is the frequent apathy of the members in the work of the societies owing to their lack of education and an absence of higher ideals. The general body very often leaves affairs wholly to the discretion of the committee and the committee transfers its powers to the chairman, secretary or some other member. Then there is the objectionable practice of making book-adjustments and taking *benami* loans. A grave defect is the inability of the societies to act as

real banks, accepting for deposit money when presented, meeting withdrawals of such savings deposits or temporary surplus funds without delay, and granting loans on demand according to actual requirements. In many a society, activity is displayed only twice in the year, once during the cultivation season when loans are advanced, and again after harvest time when recoveries are made. In several provinces, members have to wait for weeks before they can get funds for agricultural operations, and as such operations must be proceeded with, resort to the money-lender is not uncommon. With the approval of normal credits in advance and the provision of banking facilities through the opening of branches of district banks or the starting of central banks for smaller areas this defect is now being gradually remedied. To provide for members who want large loans on the security of land for clearance of debt or agricultural improvement, separate land mortgage societies have been started in the Punjab, and may be found necessary in other Provinces where large amounts are required by agriculturists on the security of their landed property. To provide finance the Punjab Provincial Bank, after entering into an agreement has issued long term debentures bearing interest 6 per cent. to the extent of Rs. 5 lakhs. A similar scheme for land mortgage banks for groups of villages has also been accepted in Madras where the local Government have agreed to the subscribe to half the capital required if the other half is raised locally. A few banks have already commenced working. But the system does not seem to have found favour and the revision of the scheme is under consideration. It is proposed in Burma to have for the work of land mortgage credit a separate organization, distinct from the organization for co-operative credit. In Bombay, the assistance asked for from the State for the scheme of co-operative land mortgage banks is the recognition of the land mortgage bank's debentures as trustee securities, and a Government guarantee for payment of interest. The Government of Bombay have approved of the starting of three societies for land mortgage credit, but in the initial stages finance will be provided for these bodies by the existing Bombay Provincial Bank, the debentures issued by which, in accordance with its agreement with the Secretary of State, will be purchased by Government to the extent of Rs. 5 lakhs. As the bye-laws in many provinces, place a limitation on the amount of loan that can be advanced to an individual and financing agencies are often unable to make long term advances, societies cannot be said everywhere to have supplanted the money-lender.

Non-Agricultural Credit Societies.—Non-agricultural credit societies have grown up in towns and cities as part of a movement for improving the economic condition of persons engaged in handicrafts and cottage industries, of artisans and small traders, members of particular castes and employees of big firms and Government departments. These societies have usually a limited liability. This is due partly to the absence of any assets in real property among their members, but mainly to the field of their work not being compact as is the case with agricultural societies, where every member may be expected to know every other member. Their constitution is based on the 'Schulze Delitzsch' model. In most societies the management is honorary, though sometimes, when the sphere of a society's work is extended, a paid staff is employed. There is in all societies a substantial share capital, payments being made in monthly instalments, and the rest of the working capital is obtained by local deposits from members and others. Loans from co-operative banks and societies usually form only a meagre proportion of the capital. At the end of the year 1925-26, out of a total working capital of nearly nine crores, only 80 lakhs were held from central banks.

At the end of every year, one-fourth of the net profits must be carried to the reserve fund and the balance may be distributed as dividend or bonus. There are a few drawbacks in the working of these societies. The most serious of these complaints are that the spirit of co-operation is lacking in many non-agricultural societies, that there is too great a desire to go in for profit-making and dividends, and a growing tendency to make the societies close preserves once they have started running on profitable lines. The rates of interest on loans are at times higher than they ought to be, and the men at the head of the societies are loth to admit new members who are in need of loans for fear of the latter cutting down the profits.

Included in this group are communal societies, and societies of employees of firms, railway companies and Government offices. There are again, in Bombay and Burma, a few societies organized on the lines of the People's Banks of Italy to assist small traders and artisans in towns and there are also some societies comprising members of particular communities. The larger banks in Bombay and Burma open current accounts, grant cash credits and overdrafts and issue or discount local bills of exchange. In Bombay, during the last few years some of the urban people's banks have also begun to finance traders on the security of goods, including agricultural produce, and this line of work is expected to develop considerably in course of time. These banks give promise of developing a truly non-capitalist system of banking run for the people and by the people, providing for the person of small means those modern banking facilities which have so largely assisted in developing trade and industries in other countries. Some of the larger non-agricultural societies, after meeting the needs of their members, have large balances on hand, which they were allowed, with the previous sanction of the Registrar, to advance to smaller primary societies. This practice is, however, being now discontinued, and the surpluses of all primary societies are being concentrated in their central banks through which all finance is provided.

With the growth of industries and the development of cities, an important labouring class has grown up in big industrial towns, and this class is as deeply indebted and as badly remunerated as the agriculturists ultimately are. Co-operation, if introduced, among people of this class, provides opportunities of organization for common ends, besides

being the means of their economic regeneration. Systematic efforts have been made, however, only in a few centres; elsewhere urban co-operation has so far been confined more or less to middle class people. The first experiment among backward classes was initiated in Bombay under the auspices of an organization known as the Debt Redemption Committee. Considerable work in this direction has also been done in Madras, through social workers and the Labour Department, particularly among the depressed classes and among the low-paid employees of municipal bodies. The Social Service League of Bombay and the Y. M. C. A. in several other centres have lately started a large number of credit societies among factory workers, and the formation of co-operative credit societies for workers in factories has come to be recognized as an essential feature of every well-considered scheme of industrial welfare work.

Loans advanced.—The total amount of loans advanced to members by agricultural and non-agricultural societies during the year 1925-26 were Rs. 12,00,70,559 and Rs. 7,34,51,258, respectively. Loans are mostly given on the security of two co-members. Under the Act, societies are allowed, subject to certain conditions, to advance loans on the hypothecation of moveable or immoveable property, and there is nothing unco-operative in this so long as personal security, which is the central principle of co-operation, is given and the borrower's property is recognized as only a secondary or collateral protection. Mortgages are taken occasionally, especially as security for long-term loans or loans for large amounts. Agricultural credit societies are not permitted to grant advances on the security of moveable property without the special sanction of the Registrar, owing to the difficulty likely to be experienced in valuing such property and keeping it in safe custody. Recently, however, in Madras, Bombay, and Burma the practice has grown up of granting short-term advances against agricultural produce to be kept in possession by the societies or by some central organization on their behalf. The system of advances on the specific security of crops in the fields has also been introduced in some provinces. Loans for agricultural purposes are made repayable at harvest time, while two or three annual instalments are allowed for repayment of advances taken for purchase of bullocks, carts, implements or for ceremonial or domestic expenses. The repayment of loans for liquidation of previous debt or for land improvement or purchase and installation of agricultural machinery is spread over a longer period extending from five to ten years.

It is impossible to insist on the restriction of loans to productive objects and there are circumstances under which unproductive loans are permissible and even advisable. What should be and generally is borne in mind is that precautions are taken by societies that the expenditure is inevitable and that it is not excessive in amount. The chief objects of the loans advanced are cultivation expenses, purchase of live-stock, fodder, seed, manure and agricultural implements, payment of rent, revenue or irrigation dues, land improvement and sinking of wells, purchase of new lands, repayment of debt or redemption of mortgaged land and personal maintenance in times of scarcity in agricultural societies; and for purchase of raw materials, for industries, or trade, for house-building, for education or medical relief and for food and other necessaries of life in non-agricultural societies. The rates of interest vary from 9⅜ per cent. in Madras and Bombay to 12½ in the Punjab, and 15 in almost all the other major provinces, both for agricultural and non-agricultural societies. Rates of lending by central banks vary from about 7 or 8 per cent. in Madras and Bombay, to 9 in the Punjab, 10 in Burma and about 12 in all the other major provinces. An unsatisfactory feature of the co-operative system in some of the provinces is the laxity and unpunctuality in the matter of repayment of loans by members and a general apathy in the matter on the part of societies. As co-operation is both financially and educationally a failure unless punctuality in repayment is ensured, no efforts are spared by organizers to educate societies in this respect. The Co-operative Societies' Act grants to societies priority of claim over other creditors (except the State or the landlord) to enforce any outstanding demand due to the societies from members or past members upon the crops or other agricultural produce, and upon the cattle, fodder or agricultural implements, in cases where loans have been advanced for the purposes specified. Law courts have ruled that the claim is not valid unless a decree is obtained by a society in its favour in advance. To carry out the intention of the framers of the legislation the Maclagan Committee recommended the conversion of this claim into a lien and thus get over the legal difficulty, and this has already been done under the Bombay Co-operative Societies Act, 1925. Most local Government have also framed rules under the Act enabling the Registrar to refer disputed claims to arbitration and to enforce the awards of the arbitrator in the same manner as decrees of the Civil Court. Under the rules in some provinces, and according to the new Act in Bombay, sums due under awards of arbitrators are, under certain conditions, made recoverable according to the procedure allowed for the recovery of arrears of land revenue. The Local Governments of Bengal, and Bihar and Orissa were the first to adopt enactments enabling the contributions levied by the liquidator of a cancelled society to be collected in the same manner as arrears of land revenue on an application being made in that behalf by the Registrar of Co-operative Societies. Legislation on similar lines has since then been adopted in almost all other provinces.

The Financing of Agricultural Societies.—As soon as the initial stage of the movement passed, a very urgent problem had to be faced. This was to finance agricultural societies the number of which was growing rapidly. And the problem was solved in different provinces according to the special conditions and the stages of development the movement had attained. In Madras, a central bank, which lent to co-operative societies all over the Presidency, was started without Government aid as early as in 1907. This was followed by the starting of banks at district head-quar-

ters. In other Presidencies, district and taluka banks were established making good the deficiency in the local capital of the societies within their respective areas of operations and in some places joint stock banks were persuaded to make advances to agricultural societies direct or through the medium of local central banks. A large number of prosperous non-agricultural societies, as stated above, could afford to make temporary advances to agricultural societies out of their surplus funds. Government aid was also freely given in a few Provinces, although with the progress of the movement, this aid was discontinued. In Bombay, there was no movement to start local financing agencies and the slow increase in the number of societies made it difficult for central banks with a restricted area of operations to work successfully. Accordingly, the Bombay Central Co-operative Bank was founded in 1911, with the object of financing co-operative societies throughout the Presidency. Later on, local central banks came to be started, and have taken over from the central bank at Bombay the work of financing societies in the various districts. The bank at Bombay has, therefore, assumed the functions and even the name of a Provincial Bank. It confines its dealings with primary societies to those areas where central banks are not likely to be established in the near future or where special local circumstances favour direct relations with a strong financial organization. For areas served by it, the Provincial Bank has opened twent-one branches, and twenty branches have been started by several of the leading district central bank.

The Madras Central Bank referred to above has also been converted into a Provincial Bank working through the district banks. A Provincial Bank with central banks and societies affiliated to it is in existence in Upper Burma, and this Bank finances primary societies either through the affiliated local banks of which, however, the majority are new and with resources undeveloped, or through the guaranteeing unions composed of societies. An Apex Bank was started in the Central Provinces in 1913 to form a link between the central banks and the joint stock banks with branches in the province. It led to the establishment of a Provincial Bank with a similar constitution in Bihar and Orissa. A Provincial Bank composed of central banks as shareholders has been started in Bengal, where, as also in Bihar and Orissa, primary societies are at present financed by central banks at district or *taluka* headquarters. In the United Provinces, primary societies are financed on the same system, and there, too, the starting of a Provincial Apex Bank under which central banks will be federated has long since been under contemplation, but the proposal has been finally abandoned by the Local Government. The Punjab has a local central banking system and an Apex-Bank with central banks, and societies as share holders has been started, with power to issue debentures, as in Bombay, with interest guaranteed by Government. Debentures of the value of Rs. 5 lakhs have already been issued with interest at 6 per cent. guaranteed by Government. In addition to the Provincial Banks mentioned above, Assam has a Provincial Bank as also the Indian States of Mysore and Hyderabad.

The constitution of central banks is not uniform, but the existing banks may be classified under three general heads :—(1) banks of which the membership is confined to individuals or where societies are admitted as members on exactly the same footing as individuals, (2) banks of which the membership is confined to societies, and (3) banks which include societies and individuals as their members and secure to societies separate representation on the board of directors. The majority of the central banks are of the mixed type and there are hardly any of them which now adhere to the old capitalist constitution. The federal type is theoretically the best, but the paucity of the resources of the constituent primary societies, the lack of personnel and the need for enlisting the support of the urban middle classes have all combined to make the mixed type the most popular in almost all provinces. In Bengal and the Punjab, as also to a smaller degree in the United Provinces and Bihar and Orissa, there has recently been an increase in the number of federal central banks, which are found to work well, provided their area of operations is much smaller than a revenue district and they serve a compact group of well-established societies. Branches of banks, central and provincial, have been tried with success only in Bombay.

Functions of Central Banks.—The functions of central banks are to balance the funds of societies and to supply capital. But their duties are not limited to the provision of banking facilities only, but often include the organisation and supervision of societies. Hence in all the major provinces with the exception of the Punjab, Madras and Burma, central banks perform the functions of supervision and guidance of the societies affiliated to them, and in some they also organise new societies and even take up the work of training and propaganda. Usually, the unit of area for a central bank is fixed as co-terminous with the whole of a revenue district, as the personnel necessary for its successful working may be difficult to secure in a smaller area. However, in most of the provinces of Upper India and Bengal there are in existence central societies for *talukas* and occasionally for smaller tracts. An important class of institutions included under the statistics of central societies are unions. These may be described as federations of societies which are maintained for supervision, either combined or not with the assessment or guarantee of loans to primary societies. They do not, however, undertake banking business, except in the Punjab, the unions in which save for the smallness of the area they cover, in no way differ from the pure type of central bank referred to above. These supervising unions have a very restricted area of operations, covering an area not larger then a taluka. They form integral parts of the provincial organization in Burma and originally in the Central Provinces also, in one province serving as a link between primary societies and the provincial bank and in the other between primary societies and local banks. The system has also been extended to Madras

though in that province no guarantee is undertaken by the unions. In Bombay, guaranteeing unions were introduced as local agencies for supervision and assessment of credit, but the policy now is to have new unions which eschew the guarantee and work as supervising and local controlling bodies with a fairly wide area of operations and engage competent well-trained supervisors. In Burma and Madras, some progress has been made in federating the unions into district councils intended to co-ordinate local activities and represent local co-operative interests.

Organization and Propaganda.—It may be mentioned that in most of the provinces, the work of organizing and looking after the societies was in the earlier days done by the Registrar with the help of a staff of assistant registrars, auditors and other officers and a few honorary non-official workers. In Bengal, Bihar and Orissa, and the United Provinces where the central bank system has developed properly, the directors of the central banks, either themselves or through a paid agency, organise societies and, as stated above, surpervise their working. Apart from these, the number of honorary workers is steadily increasing and in some provinces there is a staff of specially appointed honorary organisers who regularly assist the Registrars. The activities of the honorary workers are often, however, spasmodic and unorganized, and in most of the major provinces the need has been felt for some co-operative institution which will co-ordinate and systematize the efforts of non-official workers, and place their activities on a responsible basis. The objective is to have the movement directed and controlled through self-governing representative bodies like organisation societies or federations existing in Germany, England, Ireland and elsewhere. Such institutions carry on active educational propaganda, and through the agency of local committees and groups of workers, assist in the organization of new societies and attend to their supervizion. Arrangements are made for carrying on the audit of societies—for which Government cannot continue to increase the official staff to an unlimited extent—on payment of some fixed contributions. Finally, such federations gradually manage to have the ultimate voice in the determination of policy, and subject to the statutory powers of the Registrar may hope to take over, in course of time, the entire control of the co-operative organization in a province. In the Central Provinces, there functioned as a controlling body a federation of Co-operative Banks and Societies which provided a regular and efficient system of supervision audit and control, arranged for the training of the federation staff, attempted to secure uniformity of practice among co-operative institutions and to promote their interests and foster the spread of co-operation by active propaganda. The working of this Federation was adversely criticised in the report of a Committee of Inquiry appointed by the Local Government in 1922, and it was proposed that this body should be dissolved and replaced by separate educational institutes for the Central Provinces and Berar. Though the Federation has not been dessolved institutes for education and propaganda have already been started in Berar and the Jubbulpore and Nerbudda Divisions. A Provincial Union is also in existence in Madras, whose objects are mainly educational and propagandist. Its activities comprise the issuing of co-operative journals the organization of training classes and the holding of conferences. Its constitution and its line of work have now been revised so as to make it the central self-governing organization in the movement but its working has been considerably hampered by lack of funds and want of support from societies. Its relations both with societies, unions, district federations and the local organizations forAndhradesa. Malabar and Kanara are still undefined. A Central Institute to focus the efforts of co-operative workers and to carry on propagandist work was established in Bombay in 1918. The objects of this institution are to develop the co-operative movement in the Presidency, by promoting the study of co-operation and by co-ordinating the activities of several existing propagandist and organization agencies. The Institute has no powers of control, though it is expected to ascertain and represent the views of co-operators on questions affecting the movement. The activities of the Institute in the mofussil are carried on through its divisional branches formed on a linguistic basis and local branches in all the revenue districts of the Presidency. This is one of the most active among the non-official central organizations in India, and has established international relations. The Provincial Co-operative Institute, as well as similar organizations in other parts of India, join in the celebration of the International Co-operators' Day on the first Saturday in July. Public addresses, social gatherings, conversaziones processions and mes; meetings are arranged on this day in villages, towns and cities. Its constitution has recently been revised with a view to give to societies a larger representation and a predominant share in the working. The Institute receives a handsome grant from Government, but will be in a position to increase its income from within the movement under its revised bye-laws. In Bengal, a similar propagandist organization has been started with identcial aims. The Society has taken over some of the educational and propagandist work hitherto performed by the Co-operative Department, and has assisted in the organization of various non-credit activities, among which prominent mention may be made of the starting of Co-operative Societies for the sale of jute and paddy and the supply of agricultural requisites. It has projected a scheme for the training of members of village societies and their secretaries. A federation with a constitution more or less similar to that of the Central Provinces Federation but having divisional boards to decentralize control is also in existence in Bihar and Orissa, and has appointed a special officer for propaganda and development. In the Punjab, a provincial union, with the Registrar as President, has been organized to conduct the audit and inspection of primary societies and to undertake general propagandist work. The United Provinces have a standing committee serving as an advisory Board for the Registrars Departmant, while in Burma, the audit of primary societies is conducted by a Provincial Co-operative Council consisting of representatives of co-operative institutions. This also assists in the organization of the provincial conference and acts as an advisory body to the Registrar. Organization, supervision and propa-

ganda are furthered by district federations of unions of primary societies. Educational and propagandist bodies like the Institute in Bombay have been started in the States of Hyderabad, Mysore, Baroda and Travancore. These are all recent developments and it is still too early to forecast on what lines the transfer of work to representative co-operative agencies will be carried out. In the beginning of the year 1926, an informal Conference of all these institutes and federations was held in Bombay at which it was decided to convene an All-India Conference periodically and to establish closer contact among these bodies by the starting, if necessary, of an All-India Confederation of these bodies. At another conforence held in September 1928, this idea was given a more definite shape. Along with this Conference was also held another Conference of Provincial Co-operative Banks in different provinces and Indian States, the most important subject for the consideration of which was the proposal for the formation of an All-India Bank. To secure co-ordination in the working of existing provincial banks, to bring about closer touch and to convene periodical Conferences, an association of the provincial banks has been started to which has been referred for consideration the proposal for an All-India Co-operative Bank. This Association has made a good beginning by educating public opinion on the place of co-operative banking in the proposed scheme of a central bank and co-ordination of banking through the agency of a Reserve Bank of India. As a result of its efforts the joint select Committee of the Indian Legislature made provision in the Reserve Bank Bill, which has now been abandoned, for the appointment of a Director on the Board of the Reserve Bank to represent provincial co-operative banks and also for the negotiation of certain types of bills and securities presented by such banks.

Other forms of Co-operation.—After the passing of the amended Co-operative Societies' Act in 1912, the application of co-operation to purposes other than credit was greatly extended, but it is only during the last few years that a general demand for producers and consumers' societies has arisen. The total number of non-agricultural non-credit societies was 3,764: 614 for purchase and sale, 13 for production 1,017 for production and sales and the remaining 2,120 for other forms of co-operation. Before the year 1918-19, there were only a few stores societies all over the country. In all provinces, particularly in Madras, a beginning had been made in the direction of distributive co-operation among the middle classes, while in Bengal and the United Provinces some attention had been devoted to the starting of stores for students living in hostels attached to colleges. The movement obtained popular favour in view of the increasing prices of the daily necessaries of life, and the profiteering which assumed serious proportions at the close of the War. Supply unions, store societies, and distributive departments attached to credit societies were organized in some provinces, while arrangements were contemplated for obtaining cheap, wholesale supplies for the various distributive organizations. The work of organizing co-operative distribution in rural areas was pushed ahead with a fair amount of success under official auspices in the Punjab and Madras. but in both provinces a setback is now evident. Neither the supply unions nor the primary purchase and sale societies are in a flourishing condition. The consumers' movement in urban areas received particular attention in Bombay, Madras, Bengal, Burma, and a few other provinces, but with the disappearance of the special conditions which generated enthusiasm in the years immediately succeeding the close of the War, stagnation has set in, and only a few among the numerous store societies started in these provinces have firmly established their position and continue to enjoy the loyal support of their members. Attempts have been made in two or three provinces to revive the movement by the starting of central organizations for joint wholesale purchase, but the proposals have not yet taken definite shape. Apart from the Triplicane Stores in Madras which stands in a class by itself, the only successful consumers' societies are stores for college students, some communal hostels or boarding houses and a few agencies for supply of special requisites.

In some Provinces, efforts have been made to revive the ancient handicrafts of the country and cottage industries by organizing co-operative societies for the cottage workers. Many of these societies merely provide cheap credit, but in some places they undertake the supply of raw materials and the sale of manufactured goods. An important industry which flourished in India before the introduction of machinery was handloom weaving and efforts have been made to revive it by the formation of co-operative societies of handloom weavers. Most of the weavers' societies are merely credit societies, but some undertake the purchase of yarn for members, and others have store branches to sell the cloth produced by members. They have also been instrumental in introducing improved looms and methods among the conservative weaving classes. In Bengal and the Punjab, much success has attended the organization of central unions among weavers' societies, and similar intensive work in Bihar and Orissa and Bombay has also met with good results. Other industrial societies, to be found in very small numbers here and there are those for "gaolees" or milkmen, dyers, basket and brass workers in the Central Provinces, "Chammars" and "Dhors" in Bombay and the Punjab, lacquerware workers, carpenters, wood-carvers, blacksmiths and potters in Mysore, where the State provides special facilities in the shape of loans and technical assistance for the development of artisans' societies. In Bombay, the producers movement has extended to communities of workers like coppersmiths and goldsmiths, carpenters, dyers, and others, and drawing its inspiration from the ancient guild spirit animating the communities, it aims at creating a strong economic organization among these various industrial workers and craftsmen, based on self-help and self-government. Another off-shoot of this movement is the starting of co-operative societies among skilled or unskilled labourers on the lines of the labour societies of Italy. The initiative came from Kashmir, while experimental societies were also started in Madras, and in Bombay. The object of these is to organize

labourers to tender for contracts for public or private works, to eliminate the middleman contractor, and to utilize the profits for the economic and social betterment of the labouring community. The Indian Industrial Commission in the course of their inquiries devted some attention to the development of small and cottage industries and the possibility of reviving them by the introduction of co-operation. Their recommendations on this subject were, however, not very definite and no action appears to have been taken on these. The development of subsidiary occupations in rural areas also came up for consideration by the Royal Commission on Agriculture in India. Who were of opinion that technical education and co-operative organization were the only means by which the smaller industries could hold their own. The Commission particularly recommended the grant of advances to artisans' societies for purchase of and improved machinery and suggested the linking up of the cultivator through co-operative agency with localized factories dealing with agricultural produce.

An interesting development during recent years is the provision of housing through co-operative societies. A good number of housing societies have been started in Bombay City and suburbs and also in a few other centres in the Presidency like Ahmedabad and Karachi. They are generally organized on the co-partnership system, under which the society owns the houses and lets them to members at fixed rents. The scheme is feasible for such sections of the middle classes as can provide a certain proportion of the initial capital. Tenant-ownership societies have also been started and are now more favoured than Co-partnership societies There are some building societies in Madras and a few more in Mysore, but their activities are confined mainly to the provision of capital for building schemes and only occasionally extend to the joint purchase of land or of building materials. The Punjab has only one society for co-operative housing and town planning. The Local Governments of Bombay and Madras as also the State of Mysore set apart annually some funds to be advanced to housing societies at fair rates of interest and with repayments spread over a number of years.

The province of Burma was a pioneer in the matter of cattle insurance, and to support the village insurance societies which have been started in the province, there has been organized a central re-insurance society, which receives some financial backing from Government. In the other provinces where it has been introduced co-operative insurance for cattle has made only slight progress, and in Burma, as also in the Punjab where the movement had advanced so far as to necessitate the starting of a re-insurance society there has been a set-back recently.

Agricultural Co-operation.—Co-operative societies have, until recently, been organized only to supply cheap credit to their members, but there are various other fields of work to which they may extend their activities. The total number of agricultural non-credit societies is 2,298 of which 379 were societies for purchase and sale, 655 for production, 328 for production and sale and 743 for other forms of co-operation. Grain banks have, in some provinces, been started with advantage, receiving deposits in kind and allowing these to accumulate to be sold at profitable rates or distributed to the members in times of scarcity. Such banks have been started in Bihar and Orissa, Bengal, Mysore and Coorg. Societies on a similar basis for the storage of fodder have been started in Baroda. Another direction in which the co-operative principle is being applied is the starting of societies for purchase of and distribution among members of pure and selected seed. A number of small societies for supply of seed, and seed unions have been organized in the Bombay Presidency and in the Central Provinces and Berar. Societies for the co-operative purchase and sale of manure will also prove a great boon, and a few such stores have been established in Madras, Bengal, Bihar and Orisa and Bombay. In the Punjab and in Madras, the supply of agricultural requisites has been undertaken either by the credit societies on the commission-indent system or special supply unions are organized for bulking orders, making contracts, distributing goods, and collecting payments.

Joint sale of produce gets popular as co-operative credit thrives and agriculturists become less dependent on local traders. While Burma led the way by starting societies for the joint sale of paddy, the most interesting developments in the direction have taken place in Bombay Societies for the sale of agricultural commodities, chiefly cotton and jaggery, have been started, in several districts all over the Presidency. Co-operative marketing of cotton has recently made much progress in the Dharwar, Broach and Surat districts where these have led to the starting of a few co-operative ginning factories controlled by cotton-growers. This aspect of co-operation has lately attracted considerable attention and attempts similar to those made in Bombay have been made in Madras and the Punjab, in the latter province with considerable success at Lyallpur and Montgomery. In Bengal, there has been a move recently to organize the sale of jute and paddy on co-operative lines. A vigorous propaganda has been undertaken for the purpose and a central depot has been opened for the sale of jute principally in Calcutta. It will indeed be a great achievement if these efforts are successful and the cultivator obtains adequate returns for his produce. At present he buys in the dearest market and sells in the cheapest. But if co-operative purchase and sale show good progress, his economic position will be much improved. Apart from separate societies for the purpose, credit societies and central banks, in a few parts of the country, arrange for the joint supply of agricultural requisites. In some places, credit societies undertake the joint purchase of agricultural implements for members, while in others separate registered societies are started for the purpose of selling implements or supplying these on hire. In some provinces in Upper India, this work is performed by central banks for the societies affiliated to them. Apart from separately registered societies in Bombay, the branches of the Provincial Bank have helped consider-

ably in the distribution of seeds, manures and fertilizers, the supply of agricultural implements, and the sale of produce, particularly jaggery.

Efforts have been made in various parts of the country to solve the problem of milk-supply—to reduce the price and increase the purity—by starting co-operative dairies, composed either wholly of gaolis or milkmen or the producers and the consumers together. The most successful of these efforts has been the group of milk supply societies started in the neighbourhood of Calcutta which have federated themselves into a union. The union has, with the help of the Calcutta Municipality and the expert officers of Government erected a well equipped modern plant for pasteurizing milk, and while the milk supply it controls has been satisfactory to consumers it is interesting to note that by co-operation the producers have also considerably improved their economic position, having paid off debts, bought more cattle, put up decent cattle sheds and accumulated substantial sums in their local societies in the shape of shares and reserves. Co-operative creameries and ghee producing societies have also been started in one or two provinces. Another interesting development is the starting of cattle-breeding societies in the Punjab and elsewhere. It is anticipated that these societies will assist in supplying the keen demand that exists for bulls of good stock. In a few provinces there are societies for rice-hulling, the manufacture of jaggery and for joint irrigation. The latter is an interesting development of co-operation which though tried also in Bombay appears to have established itself in popular favour especially in the Burdwan Division of Bengal. This tract, once very flourishing, has been ravaged in recent years by frequent floods and famines, and the population had lost all initiative and sunk into poverty, while their lands deteriorated and malaria claimed a heavy toll. The starting of irrigation societies has opened a new chapter in the history of the tract and has revived the energy of the people and brought them together for common economic endeavour. Ginning on co-operative lines has also been attempted. An interesting experiment in agricultural co-operation is the starting in the Punjab of societies for the consolidation of small and scattered holdings. These arrange to regroup and re-allot the small and scattered holdings of members and if voluntary action proves sufficient for the purpose in other provinces, one of the gravest evils of modern Indian agriculture will be solved without the aid of State help or legislation. After the last floods that occurred four years ago in the central parts of the Madras Presidency co-operative societies were started to enable agriculturists to reclaim their land by clearing away the layers of sand and replacing the soil. These societies received assistance from Government, both in the shape of long term capital and facilities for transport of material. Similarly after the heavy flood, of 1927 in North Gujarat and Western Sind reconstruction societies have been started in the devastated areas for repair and rebuilding of houses. The Punjab has in canal areas some societies for silt clearance, and reclamation of waste lands, and Burma has led the way in the colonization of newly developed lands on co-operative lines. A number of societies have recently been started in the Punjab to promote better farming, some of which merely call upon members to undertake certain improvements and introduce approved method of agriculture while others go a stage farther and employ a staff for local experiment, research and demonstration work. In Bombay, a beginning was made in the direction of starting co-operative societies for joint farming and the movement may lead to the evolution of a system of co-operative cultivation of land, such as has been extremely successful in Italy, in undeveloped tracts like those to be irrigated under the Sukkur Barrage Scheme. Proposals to encourage this form of co-operation have been submitted to the Government of Bombay by the Sind Co-operative Institute.

Co-operation has already been successful to some extent in redeeming the chronic indebtedness of the agriculturist, but if the improvement in his economic condition is to be permanent it is essential that he should be prevailed upon to adopt improved methods of production. The Agricultural Departments in various provinces do undertake propagandist work with this object, but their efforts have not proved as successful as they ought to be. A co-operative society provides an effective agency for reaching the agriculturist, and in many places societies have been the means of bringing home to him the need for improved methods and have been made the centres for conducting the propagandist activities of the Agricultural Department and district Agricultural Associations. As a result, a few societies have been enterprising enough to purchase modern agricultural implements, and the machinery reecommended by the Department and to use the proper manures and the certified varieties of seeds. "Wherever agriculture and co-operation have experienced the assistance which each can derive from association with the other they are fast developing a truly organic connection." To this end, joint efforts are being promoted in almost all provinces as both the Departments are in charge of one Minister. This co-ordination is secured by joint conferences, and joint boards of co-operation and agriculture and the starting of local agricultural associations registered under the Co-operative Societies Act. Several of these bodies have lately been started in Bihar and Orissa and in Bombay. In Bombay the taluka development associations undertake active propagandist work, hold demonstrations, and assist in the work of general economic improvement of the agriculturists. The subject of agricultural co-operation and even of agricultural credit came under enquiry by the Royal Commission of Agriculture in India whose Report was published during the year. The Commission describe the co-operative movement as the greatest hope for the salvation of the rural masses from their crushing burden of debt and look upon it as the natural basis for social educational and economic development in India where the predominant industry is agriculture. They admit that there are defects in the present organization for rural credit but are confident that under the influence of patient persistent and sytematic education of the members in the

principles and meaning of co-operation these defects are bound to disappear in course of time. The provision of this education in co-operation should, the Commission hold, be the principal care of provincial Co-operative Departments, and though the strengthening of the official staff is suggested the Commission also recommend the organization of supervising unions, federations and institutes and the grant of financial support. Recommendation are also made for developing joint marketing of agricultural produce on co-operative lines and for utilizing the agency of co-operative organizations in the work of agricultural demonstration and propaganda, the supply of approved varieties of seeds, implements and manures, the consolidation of holdings and for social and educational betterment.

Committee on Co-operation in India.—In July 1914, the Government of India issued a lengthy Resolution on Co-operation in India, surveying its progress in the country during the previous ten years. In October, Government appointed a Committee under Sir Edward Maclagan to examine whether the movement, especially in its higher stages, and in its financial aspect was progressing on sound lines and to suggest any measures of improvement which seemed to be required. The enquiry was to be directed primarily to an examination of such matters as the constitution and working of central and provincial banks, the financial connection between the various parts of the co-operative organization, the audit, inspection, and management of all classes of societies, and the utilization of the reserve funds. In its Report, which was issued in September 1915, the Committee stated that it had not confined its enquiries to the subjects referred to it, for it had to recognise that the financial welfare of the higher stages of the co-operative system was largely based on the soundness of the foundation. The Government of India passed orders in 1918 on the recommendations in the light of the opinions of the Local Governments. With a view further to elicit opinion on the recommendations, a special conference of the Registrars was convened in August 1918, to which all the Registrars and a few selected non-official co-operators were invited. The Conference was also asked to consider the suggestion made by the Committee on Co-operation that as the financing of the movement involved grave difficulties which baffled solution unless the discounting of pro-notes was arranged through an Imperial State Bank or the several Presidency Banks, a careful examination of the question was immediately called for. A proposal was made for the appointment of an expert committee, but the Government of India shelved it by stating that they would assemble the committee at some date convenient to them. The question has again assumed some importance in view of the proposal for an all-India Co-operative bank referred to above and also in view of the fact that the Report of the External Capital Committee issued in 1925 makes prominent mention of the value of the co-operative organisation in developing the banking resources of the country. Pursuant to the recommendations of the External Capital Committee, the Chambers of Commerce, both Indian and European, have urged the appointment of a committee to enquire into the best methods of developing banking in India.

Provincial Legislation.—Under the Reforms, co-operation has been made a provincial subject and also a transferred subject. The control of Co-operative Departments has been entrusted to Ministers and in Bombay the United Provinces, and the Central Provinces, Bills have been drawn up for enactment by the local Legislative Councils to take the place of the Co-operative Societies Act. The Bombay Co-operative Societies Bill was introduced in the Bombay Legislative Council in July 1924, and was finally passed into law in 1925. It reproduces, in the main, the framework of the Act of 1912 but introduces the following important modifications:—

(*i*) The adoption of a scientific system of classifying societies.

(*ii*) The improvement of the procedure for liquidation of cancelled societies.

(*iii*) The extension of summary powers of recovery to the awards of arbitrators.

(*iv*) The provision of penalties against specified offences.

No other provincial Council except Burma where a Provincial Act was placed on the statue book in 1927 has yet enacted legislation on similar lines.

Provincial Inquiries.—In the Central Provinces, owing to the drying up of recoveries and the issue of large advances to agriculturists to tide over the bad season of 1920-21 the fluid resources of the movement were seriously depleted and the Apex Bank was able to meet its liabilities only with the financial assistance of Government. The fluid resources of the Provincial Bank were replenished and the Local Government, with the concurrence of the Government of India, placed credits at the disposal of the Provincial Bank and made advances direct to primary societies in the from of Tagavi loans. A Committee of Inquiry was appointed which made sweeping recommendations, the most important of which was a proposal to liquidate the Provincial Bank and to place central banks in direct touch with commercial banks. This recommendation was, however, subsequently turned down by the Local Government although some other recommendations such as the division of agricultural finance into short-term crop loans and long-term non-crop loans met with a considerable measure of public support. In Bengal and the Punjab, the return of favourable seasons averted any breakdown of the system, which threatened to overtake the local co-operative organizations when agricultural scarcity on a wide scale caused serious difficulties some years ago. The same may now be asserted of the United Provinces, where there appeared to be some danger of the strain not being quite successfully withstood. The problem there is now that of pushing ahead, and a Committee was appointed in 1925 to hold a comprehensive inquiry and to suggest the lines of future development. The Report of the Committee which was published last year contains numerous recommendations on matters of detailed administration and proposals for strengthening the official

staff of the Co-operative Department. The Committee recommend that central banks should be relieved of the work of supervision and inspection which should be entrusted to a staff working under the directions of the Standing Committees of Co-operators. The Committee further suggested that a beginning might be made in the direction of constituting an apex bank for the province but their proposal has not found favour with the local Government. Committees of Inquiry were also appointed in Bihar and Orissa and Mysore, in the former to advise about financial organization and official control and in the latter to lay down a policy of development particularly in relation to higher finance, non-credit co-operation, agricultural improvement and the relief of indebtedness. In September 1927, on the recommendation of the Madras Legislative Council, the Government of Madras appointed a Committee of seven members to enquire into the progress of the Co-operative movement in the Presidency and to suggest suitable measures for effecting necessary improvements. The Report of the Committee was published in 1928, and deals exhaustively with the defects of the movement and sets forth in detail the suggested remedies. Prominent among these is the improvement and strengthening of the system of supervising unions and the linking up of these with the provincial unions through district federations. The provincial union and district federations are charged with the duty of providing education and training and a system of liberal grants-in-aid is proposed to these bodies. Central Banks are advised to undertake the inspection of affiliated societies by appointing their own staff and at the time subsidising the federation for the work of supervision All other important recommendations are the separation of short term and long term finance in rural credit societies and the creation of a central land mortgage bank for the issue of debentures to finance local land mortgage banks. The Agricultural Commission were of opinion that similar inquiry could, with advantage be undertaken in other provinces and pursuant to this suggestion the Government of Burma have already decided to appoint a Committee of inquiry.

Effect of Crises on Co-operation.—It is hardly possible without any close and scientific inquiry, such as has not yet been carried out, to appreciate accurately the effects of the co-operative movement in enabling agriculturists to resist the rigours of a famine as also to judge the reaction of the latter on the co-operative organisation as there is an interplay of various economic forces affecting the life and industry of agriculturists, the proportionate value of which cannot be estimated easily. The agricultural season of 1918-19, however, put the co-operative organisation in most provinces to a very severe test and the reports for the succeeding years afford some indication of the resisting power of the co-operative organization.

With a better appreciation of the dependence of the agricultural finance on the vagaries of seasons, and a more systematic management of the funds of central societies it is anticipated that in future the situation arising out of a failure of rains will be satisfactorily met. In 1913 and the following months, practically the whole of the country was subjected to a banking crisis of considerable magnitude, but a marked feature of this crisis was a tendency to withdraw deposits from commercial institutions and to place them in co-operative banks. The outbreak of the War brought another set of influences into play and there was a temporary tendency to withdraw deposits and a temporary cessation of new deposits. The disturbance was not serious except in two or three provinces and by the end of the year 1914-15, the situation became practically normal. In two of the provinces where the situation caused some anxiety owing to the cessation of fresh deposits in central banks, the Government sanctioned advances to central societies to be utilized in the grant of urgent loans to agricultural societies or to meet withdrawals of deposits. The floods that overtook practically the whole of North Gujarat and one district of Sind in the earlier part of the monsoon of 1927 affected the working of Co-operative Societies in the flooded areas, but on the whole, the movement rose to the occasion. Early arrangements were made for helping agriculturists to resow and to replenish their stocks of grain or fodder and replace lost cattle, implements or domestic necessaries of life. Advances were made for these purposes at the special rate of 5 per cent. interest and, later on, demands were investigated for rebuilding or repairing houses and funds were provided either through co-operative agency or suitable recommendations were made to the local officials of Government. A charitable fund was also started for relief of distress among members and contributions to this were received from all parts of India and also from Russia.

Social Reform.—Co-operation has in some places stimulated the desire for education and members of rural societies have been known, even at advanced ages, to receive the elements of education to enable them to put their signatures on their societies' papers, and to take a lively interest in the internal work of their institutions. In Bombay, night schools for adults were started with the aid of a splendid donation made by the late Sir Vithaldas D. Thackersey, while in the Punjab, Bihar, Bengal and elsewhere such expenditure on education is incurred by co-operative institutions themselves. In the Punjab separate rural societies have been registered to conduct night schools and also to insist on compulsory education for the children of members. The Punjab also possesses a number of societies for promotion of better living, the members of which societies lay down a social Code for themselves. Breach of this code involves punishment by fines. In Bengal, attempts have been made to fight the scourge of malaria and to promote village sanitation by starting anti-malarial Co-operative societies. The societies are federated into a central union in Calcutta which supplements the local funds, co-ordinates the working of the societies, issues literature on hygiene and sanitation, and arranges with local doctors for provision of free medical relief to members. There are not a few cases where a society has set its face against drunkenness, expelled members notorious for their intemperate habits and has insisted on good moral conduct and

attempted to improve the standard of life. Societies have occasionally condemned excessive expenditure on marriages, and have thus indirectly trained members to habits of thrift. The liquidation of old debts again has been rendered possible to a great extent and many an agriculturist who was formerly in a state of chronic indebtedness has been relieved of all his debts and freed from the necessity of incurring new ones. Credit has been much cheapened and it is now possible for the agriculturist to borrow at 9 to 18 per cent. what he could not borrow at less than 20 to 75 per cent. formerly. It has been calculated that in interest alone the agriculturists of India, by taking loans from co-operative credit societies instead of from the village money-lenders, are even now saving themselves from an unnecessary burden of over a crore of rupees. The village rates of interest have naturally gone down considerably. And the Sowkar is, in most places, not the terror and the force that he was. Business habits have been inculcated with the beneficial result that the agriculturist has learnt to conduct his own work more efficiently. Thrift has been encouraged and the value of savings better appreciated. Special societies are started in the Punjab to promote thrift, while in Bombay, Bengal and Bihar & Orissa, savings of members are attracted to the village credit societies and, either special facilities are provided or special propaganda is conducted to induce members to save and deposit voluntarily. Association in a public institution for common good has brought home to the people the blessings of unity and litigation has often decreased in villages with co-operative societies. In the Punjab a number of societies have been started in rural areas whose members agree to refer all disputes to arbitration by their elected committees and to abide by the awards of arbitrators. Participation in the management of societies has instilled among members the important lessons of self-help and self-reliance ; but the most important achievement of co-operation has been the development of a sense of communal life—a feeling of "all for each and each for all"—among members of village societies and the gradual revival of the corporate instincts which made Indian rural organization famous in the world's history.

The following statements show the progress of the co-operative movement in different provinces, and contain some information about their detailed working till the end of the official year 1926-27:—

Number of Societies for all India, showing the increase since 1906-07.

—	Average for 4 years from 1906-07 to to 1909-10.	Average for 5 years from 1910-11 to 1914-15.	Average for 5 years from 1915-16 to 1919-20.
1	2	3	4
Central (including Provincial and Central Banks and Banking Unions).	17	231	304
Supervising and Guaranteeing Unions (including Re-insurance Societies).			638
Agricultural (including Cattle Insurance Societies).	1,713	10,891	25,873
Non-Agricultural	196	664	1,662
Total ..	1,926	11,786	28,477

—	Average for 5 years from 1924-25.	1925-26.	1926-27.
	5	6	7
Central (including Provincial and Central Banks and Banking Unions).	506	567	577
Supervising and Guaranteeing Unions (including Re-insurance Societies)	1,302	1,406	1,421
Agricultural (including Cattle Insurance Societies).	51,716	71,140	78,940
Non-Agricultural	4,183	7,069	8,133
Total ..	57,707	80,182	89,071

Number of Societies by Provinces for 1926-27 only.

Province.	Population in millions.	Central (including Provincial and Central Banks and Banking Unions).	Supervising and Guaranteeing Unions (including Re-insurance Societies).	Agricultural (including Cattle Insurance Societies).	Non-Agricultural.	Total number of Societies.	Number of Societies per 100,000 inhabitants.
1	2	3	4	5	6	7	8
Madras	42·3	32	385	11,436	1,501	13,354	31·6
Bombay	19·3	21	92	4,294	684	5,091	26·4
Bengal	46·7	104	4	13,954	1,333	15,395	33·0
Bihar and Orissa	34·0	59	217	7,614	368	8,258	24·3
United Provinces	45·4	70	2	5,880	287	6,239	13·7
Punjab	20·7	117	..	14,148	2,273	16,538	79·9
Burma	11·7	22	626	4,364	222	5,234	44·7
Central Provinces and Berar	13·9	37	45	3,985	57	4,124	29·7
Assam	7·6	16	..	998	51	1,065	14·0
North-West Frontier Province	2·3	1	..	27	6	34	1·5
Coorg	0·2	1	12	200	13	226	113·0
Ajmer-Merwara	0·5	6	2	485	94	587	117·4
Hyderabad Administered Area	0·1	..	..	..	10	10	10·0
Delhi	0·5	1	..	204	11	216	43·2
Total (British India)	245·2	487	1,385	67,589	6,910	76,371	31·0
Mysore	6·0	17	..	1,416	315	1,748	29·1
Baroda	2·1	5	..	675	70	750	35·7
Hyderabad	12·5	24	..	1,673	355	2,052	16·4
Bhopal	0·7	25	10	1,060	..	1,095	156·4
Gwalior	3·2	..	..	2,895	44	2,939	91·8
Indore	1·1	5	..	290	33	328	29·8
Kashmir	3·3	12	..	1,986	96	2,094	63·4
Travancore	4·0	1	26	1,250	277	1,554	38·8
Cochin	1·0	1	..	106	33	140	14·0
Total (Indian States)	33·9	90	36	11,351	1,223	12,700	37·5
Grand Total	279·1	577	1,421	78,940	8,133	89,071	31·9

Number of Members for all India, showing the increase since 1906-07.

—	Average for 4 years from 1906-07 to 1909-10.	Average for 5 years from 1910-11 to 1914-15.	Average for 5 years from 1915-16 to 1919-20.	Average for 5 years from 1920-21 to 1924-25.	1925-26.	1926-27.
1	2	3	4	5	6	7
Central (including Provincial and Central Banks and Banking Unions).	1,987	23,677	89,925	163,822	197,930	214,201
Supervising and Guaranteeing Unions (including Re-insurance Societies).			10,971	24,437	31,205	34,214
Agricultural (including Cattle Insurance Societies).	107,643	459,096	902,930*	1,661,098	2,327,899	2,622,040
Non-Agricultural	54,267	89,157	226,031	493,509	730,126	799,865
Total Number of members of primary Societies ..	161,910	548,253	1,128,961	2,154,607	3,058,025	3,421,905

* Excluding members of Cattle Insurance Societies at the end of 1915-16 and 1916-17, and those in Bombay and the United Provinces at the end of 1917-18.

Number of Members by Provinces for 1926-27 only.

Province.	Population in millions.	Central (including Provincial and Central Banks and Banking Unions).	Supervising and Guaranteeing Unions (including Re-insurance Societies).	Agricultural (including Cattle Insurance Societies).	Non-Agricultural.	Total number of Members of primary Societies.	Number of Members of primary Societies per 1,000 inhabitants.
1	2	3	4	5	6	7	8
Madras	42·3	14,328	10,709	6,12,220	215,011	827,231	19·6
Bombay	19·3	12,281	1,353	300,609	170,372	470,981	24·4
Bengal..	46·7	17,475	264	379,235	139,856	519,091	11·1
Bihar and Orissa	34·0	10,674	9,515	205,825	22,661	228,486	6·7
United Provinces	45·4	11,898	41	146,054	17,929	163,983	3·6
Punjab	20·7	37,513	....	402,585	72,296	475,881	23·0
Burma..	11·7	7,556	5,556	98,863	27,453	126,289	10·8
Central Provinces and Berar ..	13·9	77,357	4,799	59,459	9,942	69,401	5·0
Assam	7·6	1,231	....	42,478	9,499	51,977	6·8
North-West Frontier Province ..	2·3	46	....	681	167	848	0·4
Coorg	0·2	237	133	9,812	1,591	11,403	57·0
Ajmer-Merwara	0·5	1,520	142	10,185	8,336	18,221	37·0
Hyderabad Administered Area ..	0·1	....	....	....	1,891	1,891	18·9
Delhi	0·5	443	....	4,250	174	4,424	8·8
Total (British India)..	245·2	192,559	32,512	2,272,229	698,178	2,970,407	12·1
Mysore	6·0	2,383	....	53,707	42,843	96,550	16·1
Baroda	2·1	1,172	....	18,783	5,784	24,567	11·7
Hyderabad	12·5	4,142	....	35,538	14,918	50,456	4·0
Bhopal	0·7	2,360	232	17,628	....	17,628	25·2
Gwalior	3·2	6,113	....	49,905	775	50,680	15·8
Indore	1·1	1,636	....	5,730	1,793	7,493	6·8
Kashmir	3·3	2,793	....	36,476	1,509	38,045	11·5
Travancore	4·0	1,043	1,470	122,649	27,759	150,408	37·6
Cochin..	1·0	....	....	9,395	6,276	15,671	15·7
Total (Indian States)	33·9	21,642	1,702	349,811	101,687	451,498	13·3
Grand Total ..	279·1	214,201	34,214	2,622,040	799,865	3,421,905	12·3

Working Capital for all India, showing the increase since 1906-07.

—	Average for 4 years from 1906-07 to 1909-10.	Average for 5 years from 1910-11 to 1914-15.	Average for 5 years from 1915-16 to 1919-20.	Average for 5 years from 1920-21 to 1924-25.	1925-26.	1926-27.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Share capital paid up	13,19	88,87	2,51,97	5,25,66	7,80,65	8,87,38
Loans and deposits held at the end of the year from Members.	14,12	88,28	96,35	2,54,45	3,88,61	4,49,52
Loans and deposits held at the end of the year from Societies.	13,59	1,93,42*	47,81	1,49,98	2,02,18	2,36,99
Loans and deposits held at the end of the year from Provincial or Central Banks	..	..	5,03,19	12,29,88	19,21,90	22,83,76
Loans and deposits held at the end of the year from Government	5,86	10,87	25,58	67,69	1,38,04	1,51,01
Loans and deposits held at the end of the year from Non-Members and other sources	19,69	1,41,98	4,70,25	10,96,22	18,16,00	21,84,42
Reserve and other Funds	1,67	25,00	1,23,32	3,12,38	5,13,01	6,00,53
Total ..	68,12	5,48,42	15,18,47	36,36,26	57,60,39	67,93,61

* Includes loans from Provincial or Central Banks.

Working Capital by Provinces for 1926-27 only.

Province.	Population in millions.	Share Capital paid up.	Loans and Deposits held at the end of the year from							Number of annas per head of population.
			Members.	Societies.	Provincial or Central Banks.	Government.	Non-Members and other sources.	Reserve and other Funds.	Total.	
1	2	3	4	5	6	7	8	9	10	11
		Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	As.
Madras	42·3	1,75,48	56,00	56,68	5,14,36	23,42	4,50,18	62,84	13,38,96	50
Bombay	19·3	1,18,00	1,99,70	65,26	2,41,68	36,54	3,04,46	60,86	10,26,50	85
Bengal	46·7	1,21,77	68,57	10,91	3,32,62	52	3,27,68	74,77	9,36,84	32
Bihar and Orissa	34·0	37,55	10,81	2,68	2,13,65	41	1,78,50	32,85	4,75,85	22
United Provinces .. .	45·4	50,26	4,51	4,01	55,22	17	50,61	32,53	1,97,34	7
Punjab	20·7	1,20,56	52,45	39,77	4,29,82	12,58	4,18,63	1,23,32	11,97,13	93
Burma	11·7	93,81	14,92	13,00	1,33,19	9,53	1,49,54	73,90	4,87,89	67
Central Provinces and Berar ..	13·9	30,07	3,86	24,07	2,07,16	17	1,43,96	50,83	4,65,12	54
Assam	7·6	5,07	5,65	1,56	12,05	20	14,73	5,53	44,79	9
North-West Frontier Province..	2·3	19	6	2	46	..	60	..	1,33	1
Coorg	0·2	2,06	19	7	1,51	6	1,89	1,39	7,17	57
Ajmer-Merwara	0·5	5,95	1,67	88	11,58	45	17,09	6,46	44,08	141
Hyderabad Administered Area..	0·1	1,35	2,49	10	..	..	..	9	4,03	64
Delhi	0·5	1,01	..	10	580	..	10,29	58	17,78	57
Total (British India) ..	245·2	7,93,16	4,20,88	2,24,11	21,58,50	84,05	20,68,16	5,25,95	62,44,81	41
Mysore	6·0	36,75	13,74	2,93	12,05	1,76	27,59	17,57	1,12,39	30
Baroda	2·1	3,44	6,03	89	13,29	2,39	15,66	6,25	47,95	37
Hyderabad	12·5	36,30	1,45	1,36	50,75	7,29	37,49	19,55	1,54,19	20
Bhopal	0·7	1,14	1	7,88	7,53	4,87	4	3,88	18,25	42
Gwalior	3·2	10,78	91	4,55	..	40,50	2,36	8,83	67,99	34
Indore	1·1	2,21	2,42	27	11,99	2,62	11,32	7,68	38,51	56
Kashmir	3·3	14,82	18	56	21,17	5,55	11,65	7,47	61,40	30
Travancore	4·0	16 66	1,92	53	5,80	1,65	5,37	1,70	33,93	13
Cochin	1·0	2,12	1,98	1,01	2,68	33	4,78	1,59	14,49	23
Total (Indian States) ..	33.9	1,24,22	28,64	12,88	1,25,26	66,96	1,16,26	74,58	5,48,80	26
Grand Total ..	279·1	8,87,38	4,49,52	2,36,99	22,83,76	1,51,01	21,84,42	6,00,53	67,93,61	39

Indians Overseas.

NUMBERS.—The total Indian population resident in the countries to which Indians mainly emigrate for purposes of settlement, according to the latest available returns, is as follows:—

Name of Country.	Indian population.	Date of Census.
British Empire.		
1. Ceylon	820,000 ..	1926
2. British Malaya*	660,000 ..	1926
3. Hong Kong	2,555 ..	1911
4. Mauritius	264,527 ..	1921
5. Seychelles	332 ..	1911
6. Gibralter	50 (approximately) ..	1920
7. Nigeria	100 ..	1920
8. Kenya	26,759 ..	1926
9. Uganda	5,604 (Asiatics) ..	1921
10. Nyasaland	515 ..	1921
11. Zanzibar	12,841 ..	1921
12. Tanganyika Territory	9,411 ..	1921
13. Jamaica	18,401 ..	1921
14. Trinidad	121,420 ..	1922
15. British Guiana	124,938 ..	1921
		1921
16. Fiji Islands	68,733 ..	1921
17. Basutoland	179 ..	1911
18. Swaziland	7 ..	1911
19. Northern Rhodesia	56 (Asiatics) ..	1921
20. Southern Rhodesia	1,250 („) ..	1921
21. Canada	1,200 ..	1920
22. Australia— Western Australia .. 300; Southern Australia .. 200; Victoria .. 400; New South Wales .. 700; Queensland .. 300; Tasmania .. 100	2,000 (approximately) ..	1922
23. New Zealand	606 ..	1921
24. Natal	141,336 ..	1921
25. Transvaal	13,405 ..	1921
26. Cape Colony	6,498 ..	1921
27. Orange Free State	100 ..	1921
28. Newfoundland	.. ..	1921
Total for British Empire ..	2,294,724 ..	
Foreign Countries.		
29. United States of America ..	3,175 (Asiatics) ..	1910
30. Madagascar	5,272 (Indians) ..	1917
31. Reunion	2,194 ..	1921
32. Dutch East Indies	832,667 (Orientals, chiefly Chinese & Arabs) (say) 50,000 Indians. ..	
33. Surinam	34,957 ..	1920
34. Mozambique	1,100 (Asiatics and half-castes) ..	Not known.
35. Persia	3,827 ..	1922
Total for Foreign Countries ..	100,525 ..	
Grand Total of Indians Overseas	2,395, 249	

* Including Straits Settlement, Federated and Unfederated Malay States.

Origin of Indian Emigration.—Emigration is prohibited by the Hindu Shastras, and there is little evidence of any settlement of Indians overseas in early times except in Sumatra, Java and Ceylon. Emigration for purposes of labour dates from the beginning of the 19th century. From 1800 A. D. onwards Indians crossed the Bay to the Straits Settlements to work on the sugar, spice, tapioca, and cocoanut plantations of Penang, and this intercourse was allowed to continue for long without regulation. The first officially recorded instance of genuine recruitment for labour emigration occurred in 1830, when a French merchant, named Joseph Argand, carried some 150 artizans to Bourbon. The abolition of slavery in British colonies in 1834 gave the first great impetus to the movement. The sugar planters of Mauritius at once turned to India as their best recruiting ground, and between 1834 and 1837 obtained at least 7,000 recruits from Calcutta. The Government of India at a very early stage realised the necessity of bringing such emigration under regulation. The Law Commission was asked to investigate the case and to make recommendations for securing the well-being of emigrants. They advised that no legislation was required except in order to prevent undue advantage being taken of the simplicity and ignorance of emigrants by providing that a magistrate should satisfy himself that all contracts were entered into freely and understood by them and in order to secure that sufficient provision was made for their accommodation and sustenance during the voyage. A copy of every engagement was also to be transmitted to the Government under which the emigrants were to live. These recommendations were embodied in the first Emigration Act (V of 1837), which also provided that contracts should be determinable after 5 years.

History of Emigration.—Under the above Act emigration during 1837 was permitted to Mauritius, British Guiana and Australia (89 men, the first and last direct emigrants to Australia). In 1838 emigration was suspended owing to agitation in England regarding the abuses to which the system was liable, and a committee of enquiry reported in 1840 that emigrants were being entrapped by force or fraud, robbed of their wages and treated with brutality. In consequence, emigration was prohibited (Act XV of 1842) except to Mauritius and there control was tightened. In Act XXI of 1844 emigration under still stricter regulation was allowed to Jamaica, British Guiana and Trinidad. Act XIII of 1847 removed the restrictions on emigration to Ceylon. The emancipation of slaves in the French colonies in 1849 gave rise to a system of emigration from French Indian ports to Réunion and Bouron, which was largely based on crimping in British territory. This practice was checked by Act XXIV of 1852. In 1858 emigration was opened to St. Lucia, and in 1860 to St. Vincent, Natal and St. Kitts. In the latter year a more elaborate Act, based on a convention with the French Government was passed legalising and regulating emigration to Réunion Martinique, Guadeloupe, and French Guiana. At XIII of 1864 marks an important stage in the history of emigration, since it elaborated and consolidated the whole system of control. It was itself amended in 1869 and 1870 in important respects with the object of preventing epidemics on emigrant vessels and improving sanitary conditions in settlements. In 1869 emigration was permitted to Grenada, and in 1872 to Surinam. Owing to the removal of the Straits Settlements from the control of the Government of India in 1867, emigration to that colony came under all the restrictions imposed by the Emigration Act and was only permitted from the port of Negapatam. Owing to the injury caused to the agricultural industries of the colony, these restrictions were removed in 1872, subject only to magisterial control of recruitment in India. In 1870 complaints reached the Government of India of gross abuses in the treatment of emigrants in British Guiana. A commission of enquiry was appointed, and their report led to important legislation in the colony for the protection of Indian immigrants, which was subsequently extended to Trinidad. Owing to similar complaints from Natal and Mauritius, commissions of enquiry were also instituted in both these colonies, and their reports in 1872 brought to light a number of points requiring amendment.

Recent Legislation.—In 1871 a fresh consolidating Act was passed (Act VII of 1871) by which the Acts regulating emigration to the French Colonies and two amending Acts to Act XIII of 1864 were incorporated in the general law. The question of revision of the law again came up for consideration in 1882, when several cases of kidnapping and other objectionable practices were reported to the Government of India. The opportunity was taken to depute two officials (Major Pitcher and Mr. Grierson) to ascertain, in the N. W. P. and in Bengal respectively, the way in which the system of recruitment actually worked, the respects in which it was open to improvement, and the attitude of the people towards emigration. Their reports were reviewed by the Government of India, and finally in 1883 the law was again recast and consolidated by Act XXI of that year. This Act specifies the countries to which emigration is lawful, but empowers the Governor General in Council to add to the list by notification, and also to prohibit emigration to any of the countries in the list on the ground of epidemic disease and or excessive mortality among emigrants in such country, or on the ground that proper measures have not been taken for the protection of emigrants, or that the agreements made with them in India are not duly enforced. This Act with certain amendments of no importance to the system of indentured emigration remained in force until 1908, when a fresh revision of the law was undertaken.

Under the Act of 1908 (XVII of 1908) the countries to which emigration was lawful were the British Colonies of Mauritius, Jamaica, British Guiana, Trinidad, St. Lucia, Grenada, St. Vincent, Natal, St. Kitts, Nevis, Fiji, the Seychelles, the Netherlands Colony of Dutch Guiana and the Danish Colony of St. Croix. Emigration to St. Lucia, Grenada, St. Vincent, St. Kitts, Nevis, the Seychelles and St. Croix ceased soon after the passing of the Act, the

demand for fresh labour having died out Emigration to Natal was discontinued from the 1st July 1911 as the Government of India were satisfied that it was undesirable to continue to send Indian labour to that country. Emigration to the French Colonies of Reunion, Martinique and Guadeloupe had been suspended prior to the passing of the Act of 1908 on account of repeated complaints of the inadequate precautions taken for the proper treatment and repatriation of the immigrants.

The labour laws of the several Colonies provide for the protection and welfare of resident Indian labourers. The Government of India also occasionally depute to the colonies their officers to report on the condition of Indian labourers. Deputations from India visited Fiji and British Guiana in 1921. In spite of all precautions certain social and moral evils had grown up in connection with the indentured system of emigration and Indian public opinion has during the last decade been strongly opposed to it. The whole system was exhaustively examined by the Government of India in 1915 in the light of the report received from Messrs. McNeill and Chimanlal, and they arrived at the conclusion that the time has come when contract labour should be abolished. The Secretary of State for India accepted this policy and authorised the Government of India to announce the abolition of the indentured system and the announcement to this effect was made in 1916.

In 1922 a further step forward was taken in Act VII of 1922 which prohibited indentured emigration and all unskilled emigration, except to countries specially approved by the Legislature. Emigration to Ceylon and Malaya was brought under control, and the definition of "Emigrant" was extended to cover all persons "assisted" to depart from India.

References.—The following is a list of the most important reports on questions connected with Indian Emigration that have been published during recent years:—

1. Report of the International Commission appointed to enquire into the condition and treatment of British India immigrants in Reunion 1879.

2. Report on the system of recruiting coolies in the North Western Provinces and Oudh for the Colonies, 1883.

3. Major Pitcher and Mr. Grierson's report on the system of recruiting labourers in the North Western Provinces and Bengal for the Colonies, 1883.

4. Report of the Natal Indian Immigrants Commission, 1885-87.

5. Dr. Comin's report on the proposed resumption of Emigration to Réunion, Martinique and Guadeloupe, 1892.

6. Dr. Comin's report on Emigration from the East Indies to Surinam, 1893.

7. Mr. Muir-Mackenzie's report on Emigration to Réunion, 1894.

8. Mr. Muir-Mackenzie's report on the condition of Indian immigrants in Mauritius, 1895.

9. Report of the Commissioners appointed to enquire into the question of Indian immigration, 1896.

10. Lord Sanderson's Commission's Report on Emigration from India to the Crown Colonies and Protectorates, 1910.

11. Report of the Indian Enquiry Commission South Africa, 1914

12. Messrs. McNeill and Chimanlal's report on the condition of Indian Emigrants in the four British Colonies: Trinidad, British Guiana or Demerara, Jamaica and Fiji, and in the Dutch Colony of Surinam, 1914-15.

13. Marjoribanks' and Marakkayar's report on Indian labour emigrating to Ceylon and Malaya, 1917.

14. South Africa Asiatic Enquiry Commission report, 1921.

15. Report by Right Hon. V. S. Shastri regarding his Dominion tour, 1923.

16. India and the Imperial Conference of 1923 compiled by Director of Public Information, Government of India.

17. Reports on the scheme for Indian emigration to British Guiana.

18. Report by Kunwar Maharaj Singh on his deputation to Mauritius, 1925.

19. Report by Kunwar Maharaj Singh on his deputation to British Guiana, 1926.

20. Annual Report of the Agent of the Government of India in Ceylon, 1927.

21. Annual Report of the Agent of the Government of India in British Malaya for the year 1927

22. Annual Report of the Agent of the Government of India in South Africa for the year ending 31st December 1927.

Present Position.—Indian emigration questions have recently taken on a wider aspect. The status of Indians in the Empire generally is one in which the Indian public now take keen interest. It is no longer possible to deal with the treatment of Indian labour apart from other classes of Indian emigrants and travellers. In several colonies and dominions considerable Indian communities have sprung up, which although composed largely of the descendants of indentured labourers, are themselves free and lawfully domiciled citizens of the countries in which they are settled, but have not yet been placed on a footing of legal, social, political and economic equality with the rest of the population. The issues round which public interest at present centres are three:—

(*a*) Control of emigration.

(*b*) Rights of Indians to admission to other parts of the Empire.

(*c*) Rights and disabilities of Indians domiciled overseas.

These questions may be considered separately.

Control of Emigration.—So far as unskilled labour is concerned, the Government of India have assumed absolute powers of control. The terms of section 10 of the Emigration Act of 1922 are as follows:—

"10. (1) Emigration, for the purpose of unskilled work, shall not be lawful except to such countries and on such terms and conditions as the Governor-General in Council, by notification in the *Gazette of India*, may specify in this behalf.

"(2) No Notification shall be made under sub-section (1) unless it has been laid in draft before both Chambers of the Indian Legislature and has been approved by a resolution of each Chamber, either without modification or addition, or with modifications and additions to which both Chambers agree, but, upon such approval being given, the notification may be issued in the form in which it has been so approved."

Under this law emigration has been legalized to Ceylon on the following conditions:

(1) The emigrant shall—

(*a*) have been recruited by a person licensed for that purpose by and responsible to an officer (hereinafter called the Emigration Commissioner) appointed by the Government of Ceylon, or

(*b*) have applied direct to the Emigration Commissioner for an assisted passage and have been accepted by him.

(2) The emigrant shall not, before leaving British India, have entered into a contract of service for a period exceeding one month.

(3) Within six months from the issue of this Notification, or within such further period as the Governor General in Council may by notification appoint, the Legislature of Ceylon shall have enacted that any contract of service for a period exceeding one month entered into by an emigrant shall be void.

(4) No part of the cost of his recruitment, subsistence during transport, or transport shall be recoverable from any emigrant and all expenses in this connection shall be defrayed from a common fund to be raised in such manner and managed by such agency as may appear suitable to the Colonial Government.

(5) The Government of Ceylon shall at any time when so desired by the Governor General in Council admit and give all facilities to an Agent appointed under section 7 of the Act.

(6) Within one year of his arrival in Ceylon any emigrant who has been assisted to emigrate at the cost of the common fund referred to in clause (4) shall, on satisfying the Agent appointed under section 7 of the Act that his return to his home is desirable either on the ground of the state of his health or on the ground that the work which he is required to do is unsuitable to his capacity, or that he has been unjustly treated by his employer, or for any other sufficient reason, be repatriated free of cost to the place of recruitment, and the costs of such repatriation shall be defrayed by the Government of Ceylon or the Ceylon Planters' Association.

(7) If at any time there is no Agent appointed under section 7 of the Act, the Government of Ceylon shall appoint a person to perform the duties of the Agent as set forth in clause (6).

(8) Within six months from the issue of this Notification, or within such further period as the Governor-General in Council may by notification appoint, the Legislature of Ceylon shall have enacted that no payment made in India by a recruiter to an emigrant to enable him to pay off debts before emigrating shall be recoverable.

(9) The Government of Ceylon shall furnish such periodical reports and returns as may be required from time to time by the Government of India in respect of the welfare of persons emigrating to Ceylon in accordance with this Notification.

Similar conditions have been imposed in the case of Malaya. Emigration was also permitted to Mauritius for a period of 1 year only with effect from May 1st. 1923, and limited to a number not exceeding 1,500 labourers. The terms were more onerous than in the case of nearer Colonies and the arrangement has now lapsed.

Emigration to British Guiana for the purpose of unskilled work has also been declared lawful on the terms and conditions given below, but the date from which emigration is to commence has not yet been fixed :—

Emigration to British Guiana.—Emigration to British Guiana for the purpose of unskilled work shall be lawful with effect from such date as the Governor-General in Council may with the concurrence of the Governor of British Guiana notify in the *Gazette of India* on the following terms and conditions, which shall thereupon become operative :—

(1) The family shall be the unit for the purposes of emigration. Not more than 500 families shall be permitted to emigrate and the number of persons included in the said 500 families shall not exceed 1,500.

(2) The emigrants shall either have been recruited by a person licensed for that purpose by and responsible to an officer (hereinafter called the Emigration Commissioner) appointed by the Government of British Guiana, or have applied direct to the Emigration Commissioner for an assisted passage and have been accepted by him.

(3) No part of the cost of his recruitment or subsistence during transport shall be recoverable from any emigrant and all expenses in this connection shall be borne by the Government of British Guiana or met from funds at their disposal.

(4) The Government of British Guiana shall, at any time when so desired by the Governor General in Council, admit and give all facilities to an Agent appointed under section 7 of the Act.

(5) If at any time there is no Agent appointed under section 7 of the Act, or if the Agent is absent or unable to perform his duties, the Government of British Guiana shall at the request of the Governor-General in Council appoint a person to perform temporarily the duties of the Agent.

(6) Prior to the arrival of the emigrants a Settlement Commission shall be appointed in British Guiana to select and prepare suitable agricultural land for the emigrants and generally to supervise their employment. The Agent referred to in clause (4) shall, on appointment, be a member of such Commission.

(7) The Government of British Guiana shall offer to each family for its separate enjoyment a holding comprising not less than five acres of suitable agricultural land prepared for cultivation on the terms hereinafter set out in a locality which shall be healthy and shall have an adequate supply of good drinking water. All expenses in connection with the preparation of the holdings shall be borne by the Government of British Guiana and shall in no case be recoverable from an emigrant.

The annual rent of the holding shall be fixed by the Settlement Commission at a rate not exceeding the lowest rate paid in the locality.

After an emigrant has been in occupation of a holding for three years, he shall, provided that he has cultivated a portion of the holding either by himself or through some member of his family, be entitled to a grant of the holding on payment at any time during the ensuing four years of such fees not exceeding 24 dollars as may be fixed by the Settlement Commission.

On the expiry of seven years from the date of the commencement of his occupation of a holding an emigrant shall acquire absolute ownership in the holding provided that he has paid the rent and fees referred to in the foregoing paragraphs of this clause and has brought under cultivation either by himself or by some member of his family half the area of his holding.

(8) An emigrant on arrival in British Guiana shall be housed and maintained without charge by the Government of British Guiana for at least one month.

(9) If any emigrant so requires loans shall be made to him for maintenance, house accommodation, payment of rent and for agricultural purposes generally. Free medical assistance and free skilled supervision shall be provided.

(10) Any emigrant shall be entitled to repatriation at the expense of the Government of British Guiana to the place of his former residence in India on the expiry of 7 years from the date of his arrival in British Guiana.

Any emigrant shall be entitled to repatriation at the expense of the Government of British Guiana to the place of his former residence in India on the expiry of more than 3 and not more than 5 years from the date of his arrival in British Guiana on payment to the Government of British Guiana of half of the cost of his passage from his residence in India to British Guiana.

Any emigrant shall be entitled to repatriation at the expense of the Government of British Guiana to the place of his former residence in India on the expiry of more than 5 and not more than 7 years from the date of his arrival in British Guiana on payment to the Government of British Guiana of quarter of the cost of his passage from his residence in India to British Guiana.

(11) Notwithstanding anything contained in the last preceding clause the Government of British Guiana on the request of an Agent appointed under section 7 of the Act shall repatriate at its own expense and without any payment by or on behalf of the emigrant to the place of his former residence in India any emigrant at any time after his arrival in British Guiana.

(12) An emigrant shall be at liberty at any time after his arrival in British Guiana to take up work or employment other than or in addition to the cultivation of a holding on lease from the Settlement Commission.

(13) The ordinance enjoining compulsory education in British Guiana shall be enforced to the same extent in the case of Indian children as in the case of children belonging to other communities.

(14) Boards of arbitration in regard to wages shall be established before the arrival of the emigrants and Indians shall be adequately represented on such boards.

(15) Any Indian who has emigrated to British Guiana before the date of this notification and under any agreement in force at the date of this notification is entitled to an assisted return passage to India shall not be required to pay more than 25 per cent. of the excess in the cost of his return passage and clothing over the cost of such passage and clothing at the time of his first arrival in the colony.

(16) Any Indian who has emigrated to British Guiana before the date of this notification and has at the date of this notification become or thereafter becomes destitute shall be entitled to be repatriated to India at the expense of the Government of British Guiana without being further required to prove that he has become incapable of labour.

(17) The Government of British Guiana shall furnish such periodical reports and returns as may be required from time to time by the Government of India in respect of the welfare of the persons emigrating to the Colony in accordance with this notification.

Admission of Indians to Other Parts of the Empire.—On the motion of the Government of India this question was discussed at the Imperial War Conferences, 1917 and 1918, and the policy accepted by the self-governing dominions and the British Government was embodied in the following resolutions:—

"(1) It is an inherent function of the Governments of the several communities of the British Commonwealth including India, that each should enjoy complete control of the composition of its own population by means of restriction on immigration from any of the other communities.

"(2) British citizens domiciled in any British country, including India, should be admitted into any other British country for visits, for the purpose of pleasure or commerce, including temporary residence for the purpose of education; such right shall not extend to a visit or temporary residence for labour purposes or to permanent settlement.

"(3) Indians already permanently domiciled in the other British countries should be allowed to bring in their wives and minor children on condition: (*a*) That not more than one wife and her children shall be admitted for each such Indian; and (*b*) that each individual so admitted shall be certified by the Government of India as being the lawful wife or child of such Indian."

The first paragraph of this resolution has regularized the various restrictions on immigration which the self-governing dominions have, from time to time, adopted and which, without expressly differentiating against Indians are in practice used in order to check Indian immigration, the objections to which are stated to be not racial or political but economic. Australia prohibits the entry of any person who fails to pass a dictation test of not less than 50 words in any prescribed language. New Zealand prohibits the entry of any person who has not received in advance a permit from the Dominion Government which is refused to any person regarded as unsuitable to settle in the country. South Africa prohibits the entry of any person deemed by the Minister of the Interior on economic grounds or on account of his standard or habits of life to be unsuited to the requirements of the Union. Canada prohibits the landing of any person who has come to the Dominion otherwise than by continuous journey from the country of which he is a native and unless he possesses in his own right 250 dollars. Newfoundland and the Irish Free State impose no restrictions. All the self-governing Dominions have adopted special exemptions in favour of students, tourists and merchants visiting the countries for the temporary purposes of commerce, pleasure, or education. India on its side has assumed power to regulate the admission of immigrants from any other part of the Empire or foreign countries, by means of passports. A bill has also been passed by the Indian Legislature empowering the Government of India to make rules "for the purpose of securing that persons not being of Indian origin, domiciled in any British possession, shall have no greater rights and privileges as regards entry into and residence in British India, than are accorded by the law and administration of such possession to persons of Indian domicile." With regard to the Crown colonies and protectorates, the attitude of the Indian Government is that there is no justification for placing any restrictions on the immigration of British Indians, which are not placed on other classes of British subjects, and this principle has in practice been observed by the Colonial Office except in the case of Kenya colony where, as stated hereafter, the British Government has reserved to itself the right to impose restrictions on the immigration of classes of people whose entry into the colony may have an adverse effect on the economic evolution of the indigenous population.

Rights and Disabilities of Indians Lawfully Domiciled Overseas.—The policy of the Empire is summed up in the resolution of the Imperial Conference, 1921, which was recorded in the following terms:—

"This Conference reaffirms that each Community of the British Commonwealth should enjoy complete control over the composition of its own population by restricting immigration from any of the other communities, but recognises that there is incongruity between the position of India, as an equal member of the Empire, and the existence of disabilities upon British Indians lawfully domiciled in some parts cf the Empire, and this Conference, therefore, is of opinion that in the interests of the solidarity of the Commonwealth it is desirable that the rights of such Indians to citizenship should be recognised."

"The representatives of South Africa regret their inability to accept this resolution in view of the exceptional circumstances of the greater part of the Union. The representatives of India while appreciating the acceptance of this resolution, nevertheless feel bound to record their profound concern at the position of Indians in South Africa and hope that by negotiations between India and South Africa a way can be found as soon as may be to reach a more satisfactory position."

The Right Hon'ble Srinivasa Sastri visited the Dominions of Australia, Canada, and New Zealand in the course of 1922 as the emissary of the Government of India to assist them in giving effect to this resolution. The main object of his mission was to appeal to the Governments and public of Canada and Australia fully to enfranchise qualified domiciled Indians. In Australia, Indians resident in Queensland and Western Australia have neither the provincial nor the federal franchise. In Canada, Indians resident in British Columbia are excluded from the dominion as well as the provincial franchise. While successful in securing a more sympathetic atmosphere towards Indians, he failed to bring about any modification in the existing electoral laws.

The question of giving effect to this resolution of 1921 was raised by the Indian representatives at the Imperial Conference, 1923. Their proposal was as follows:—

"Let the Dominion Governments who have an Indian population, let His Majesty's Government in the areas under their direct control, such as Kenya, Uganda, Fiji and other places where there are Indians resident, appoint Committees to confer with a Committee which the Government of India will send from India and explore the avenues of how best and how soonest the principle of equality implicit in the 1921 Resolution may be implemented."

This proposal was favourably received by the Dominion Premiers, excluding General Smuts; and by the Secretary of State for the Colonies who cordially agreed that there should be full consultation and discussions between him and a Committee appointed by the Government of India upon all questions affecting British Indians domiciled in British Colonies and protectorates and mandated territories. In pursuance of the proposal, the Government of India appointed a Committee in March 1924 composed of Mr. J. Hope Simpson, M.P., *Chairman*, H. H. the Aga Khan, Sir B. Robertson, Diwan Bahadur T. Rangachariar, M.L.A., and Mr. K. C. Roy with Mr. R. B. Ewbank, C.I.E., I.C.S., as Secretary to make representations to the Colonial Office on certain outstanding questions affecting Indians in Kenya and Fiji. The Committee assembled in London early in April 1924 and dispersed towards the end of July. During this period they had several interviews with the Secretary of State for the Colonies and the officials of the Colonial Office, in which they made representations upon a variety of important matters affecting Indians in Kenya, in Fiji and

in the mandated territory of Tanganyika. In regard to Kenya, the representations covered all questions of interest to India dealt with in the decision of His Majesty's Government. The result of these representations was announced by Mr. J. H. Thomas in the House of Commons on August 7th, 1924. The situation in Kenya has also been improved as a result of the work of the Committee by the decision of the Indian community to relinquish their former attitude of non-co-operation and to accept an arrangement by which they will select five members to be nominated by the Governor to the Legislative Council. The result of the representations which the Committee made on certain outstanding questions relating to Indians in Fiji was announced on January 12th, 1927, when the Government of India published the more important papers relating to the negotiations which had been going on with the Colonial Office for some time. The main results of these negotiations may be summarised under the following heads :—

(1) **Representation in the Legislative Council.**—Indians have up to the present been represented in the Fiji Legislative Council by one nominated non-official member. The number of seats provided for the elected representatives of the Indian community has now been increased to three. The seats will be filled temporarily by nomination till the necessary amendment of the Letters Patent can be effected to enable the Indian community to return members by election.

(2) **Municipal Franchise.**—The question of facilities for the representation of Indians on the Municipal Councils will be referred to the Government of Fiji for examination in the first instance by a local committee on which the Indian community will be adequately represented.

(3) **Appointment of a Special Officer to look after Indians.**—The Secretary of State for the Colonies has been unable to agree to the appointment of an Agent of the Government of India in Fiji but is considering a proposal to make an addition to the Fiji Government Service of an Officer possessed of special Indian experience and language qualifications who will be competent to act as Adviser to the Governor on matters affecting Indians in Fiji and will be given a seat in the Fiji Legislative Council. An authorised representative of the Government of India may also visit the Colony occasionally to examine and report upon specific questions of interest to that Government on the understanding that if and when such a visit is made a copy of his report or at least the general nature of it will be communicated to the Governor of Fiji before the representative leaves the colony and prior to its submission to the Government of India.

These results may not be all that the Government of India pressed for or that Indian opinion desired, but they represent an improvement on the existing position and may, if received with good will and worked in good faith by the parties primarily concerned, lead to arrangements more in consonance with Indian aspirations. The immediate and the most important objective is the dispelling of racial distrust and animosity. To assist in its speedy achievement the Government of India have, after careful consideration, decided not to publish the report of their Deputation which visited Fiji in 1922. They are anxious to avoid anything that may rekindle dying controversies.

Summary of Present Position.—Outside Australia, N. Zealand and Canada the position stands as follows :—

(1) **South Africa.**—The main grievances of Indians, which led to a passive resistance movement headed by Mr. Gandhi, were settled by the compromise embodied in the Indians Relief Act, 1914, and by the guarantee known as the Smuts-Gandhi agreement. The substance of this agreement is embodied in the following extracts from letters:

(i) Mr. Gorges, Secretary for the Interior, to Mr. Gandhi, June 30th, 1914: "With regard to the administration of existing laws, the Minister desires me to say that it always has been, and will continue to be, the desire of the Government to see that they are administered in a just manner and with due regard to vested rights."

(ii) Mr. Gandhi to Mr. Gorges, July 7th, 1914: "By vested rights I understand the right of an Indian and his successors to live and trade in the township in which he was living and trading, no matter how often he shifts his residence or business from place to place in the same township."

This has been officially interpreted to mean "that the vested rights of those Indians who were then living and trading in townships, whether in contravention of the law or not should be respected."

In 1920 an Asiatic Enquiry Commission was appointed to investigate the grievances of Indians regarding their rights to trade and hold land in the Union. Their main recommendations were as follows :—

(1) Law 3 of 1885 (Transvaal), the Gold Law of the Transvaal (Act No. 35 of 1908) and Act No. 37 of 1919 should not be repealed.

(2) There should be no compulsory repatriation of Asiatics; but

(3) Voluntary repatriation should be encouraged.

(4) There should be no compulsory segregation of Asiatics; but

(5) A system of voluntary separation should be introduced under which municipalities should have the right, subject to certain conditions—

(*a*) to lay out residential areas for Asiatics;
(*b*) to set aside certain streets or portions of the town for Asiatic traders to which existing license holders should gradually be attracted.

(6) These areas should be selected and allocated by a board of independent persons, in consultation with the Municipal Council and Asiatic community.

(7) In Natal the right of Asiatics to acquire and own land for farming or agricultural purposes, outside townships, should be confined to the coast belt, say, 20 to 30 miles inland.

(8) A uniform "License Law" applicable to all the Provinces of the Union should, be possible, be enacted. If that is impracticable, the law relating to the issue of Trade Licenses in the Cape Province, the Transvaal and Natal should be assimilated in a comprehensive consolidating Act of Parliament providing, *inter alia*:—

(*a*) That the granting of all licenses to trade (not being liquor licenses) shall be entrusted to municipal bodies within the area of their jurisdiction; outside those areas, to divisional Councils in the Cape Province, and in the other Provinces to special Licensing Officers appointed by the Administrator.

(*b*) The grounds upon which an application for the grant of a new license may be refused.

(*c*) That the reasons for the refusal to grant any license shall be recorded, together with any evidence tendered for or against the application.

(*d*) That, in the case of the refusal of a license on the ground that the applicant is not a fit and proper person to hold the same or to carry on the proposed business, there shall be a final appeal to a Special Appeal Board, appointed by the Administrator.

(*e*) That municipal bodies shall have the right to prohibit the license holder, or any other person, from residing in any shop, store or other place of business.

(9) There should be no relaxation in the enforcement of the Immigration Laws, and more active steps should be taken to deal with prohibited immigrants who have evaded the provisions of those laws.

(10) The administration of the Asiatic policy of the Government should be placed in the hands of one official, under whose charge would come all administrative functions, together with the official records relating to Asiatics. This officer should also be entrusted with the duty of securing full statistics regarding Asiatics in the Union and of the arrivals in and departures from South Africa. Details of all applications for trade licenses, and transactions in connection with the purchase of land and property made by Asiatics throughout the Union, should be sent to him in order to ensure the enforcement of the provisions of Section 8 of Act 22 of 1913.

On the other hand, he should keep in close touch with the various sections of the Indian community, see that the laws are applied in a just manner, give a ready ear to any complaints or grievances and generally safe-guard their interests.

From the above it will be observed that the Commission recommended the retention of a law prohibiting the ownership of land by Asiatics in the Transvaal, and another of its recommendations, threatened the right which Indians had previously enjoyed of acquiring and owning land in the Uplands of Natal. Against this latter proposal the Government of India earnestly protested, but it was not accepted by the Union Government.

Present Position.—Indians enjoy both the political and municipal franchise only in the Cape Province and the municipal franchise only in Natal. In the remaining two provinces they are not enfranchised. They are subjected to differential treatment in the matter of trading licenses, specially in the Transvaal. Their immigration into the Union is barred and severe restrictions exist on inter-provincial migration. In the Transvaal they are not allowed to acquire immovable property outside locations and on the Witwatersrand they are subject to the restrictions of the Gold Law.

The anti-Asiatic party have made several efforts, especially in Natal, further to curtail the rights of Indians. Some of these are merely irritating social disabilities, such as railway regulations debarring Indians from travelling in any other carriages except those reserved for them, and similar rules restricting their use of tramways at Durban, and excluding them from race courses and betting club rooms. Examples of recent anti-Asiatic legislation of major importance are:

(*a*) The Natal Rural Dealers Licensing Ordinance, transferring the power of granting trading licenses from the Licensing Officer to an elected Licensing Board, on which Indians may not sit.

(*b*) The Durban Land Alienation Ordinance. This Ordinance, which enables Municipalities in selling land to assign it for particular communities, and to that extent to secure segregation, has been allowed on condition that Asiatics are given reasonable opportunity for acquiring adequate residential sites.

Anti-Asiatic feeling in South Africa.—A bill for the segregation of Asiatics known as the Class Areas Bill was introduced in the Union Assembly in March 1924, which though not specifically directed against Indians, contained provisions which could be used for the compulsory segregation of all Asiatics in certain areas. Indian opinion was deeply agitated over the prospect of this legislation which it was apprehended might in the existing state of public opinion in South Africa result in the economic ruin of a large number of Indian traders in the Union. In response to the vigorous protests made by the Government of India the Union Government gave an assurance that it was their desire and intention to apply the measure if it became law in a spirit of fairness to the interests and reasonable requirements of resident Indians. The Government of India whilst welcoming the assurance were unable to rest satisfied with this position and made every effort to persuade the Union Government to abandon the project. For the moment they have succeeded, as in consequence of the unexpected dissolution of the South African Parliament the bill has lapsed.

In Natal an Ordinance was introduced in the Provincial Council in 1921 dealing with the township franchise to the detriment of the Indian community. It was again introduced in 1922 and in a modified form in 1923 but in each instance the Union Government withheld its approval. In 1923, the Union Government itself introduced a measure entitled "The Class Areas Bill," containing provisions which could be used in urban areas for the compulsory segregation of Asiatics. Indian opinion was deeply exercised over the prospects of this legislation, despite the assurance of

the Union Government that it desired to apply the measure in a spirit of fairness to the interests and reasonable requirements of Indian residents. But in consequence of the unexpected dissolution of the South African House of Assembly in April, 1924, the Bill lapsed. Towards the end of December 1924, news was received that the Government of South Africa had given its consent to the Natal Borough Ordinance. This measure while safeguarding the rights of Indians already on the electoral roll of Boroughs, prevents further enrolment of Indians as burgesses. Similarly the Natal Township Franchise Ordinance (No. 3 of 1925) was passed to or to render Indians ineligible for Township Franchise in future. Further, towards the end of January 1925, news was received that the Union Government had gazetted a Bill to amend the Mines and Works Act in order to take powers to refuse certificates of competency to natives or Asiatics in certain occupations. The Government of India made suitable representations in the matter to the Union Government and the Select Committee to which the measure was referred altered its wording so as not to refer to Asiatics and natives directly. The Bill as amended by the Select Committee was passed by the Union Assembly but rejected by the Senate. In January 1926 it was reintroduced and in May it was adopted in a joint Session of the Senate and the Assembly, by eighty-three votes to sixty-seven. In reply to representations made by the Government of India they were informed that there was no present intention on the part of the Union Government of extending regulations beyond the position as it existed prior to the judgment of the Transvaal Provincial Division of the Supreme Court in the case Rex *versus* Hildick Smith when it was held that certain regulations with reference to mines and works which have actually been in force in the Union of South Africa since 1911 and in certain provinces for many years before that date were not valid under sections of the Act in terms of which they were promulgated. The Government of India have also been assured that should any such extension of the scope of these regulations be contemplated in future every reasonable opportunity will be given to all the parties in the Union interested in the matter to make representations.

In July 1925, a more comprehensive Bill, known as the Areas Reservation and Immigration and Registration (Further Provision) Bill, was introduced in the Union Assembly. The Government of India made effective representations against the provisions of this Bill both on grounds of principle as well as of detail.

Deputation to S. Africa.

Towards the end of November 1925, the Government of India, with the concurrence of the Government of South Africa, sent a deputation to South Africa, the personnel of which was as follows :—

- G. F. Paddison, Esq., C.S.I., I.C.S., Commissioner of Labour, Madras—*Leader*.
- Hon'ble Syed Raza Ali, M.C.S.—*Member*.
- Sir Deva Prasad Sarvadhikary, Kt., C.I.E.—*Member*.
- G. S. Bajpai, Esq., C.B.E., I.C.S.—*Secretary*.

The main purpose of the deputation was to collect as soon as possible first-hand information regarding the economic condition and general position of the resident Indian community in South Africa and to form an appreciation of the wishes and requirements of the Indian community in South Africa. Its preliminary report was received in India early in January. On the basis of the facts disclosd in that report the Government of India felt justified in renewing their proposal for a round table conference and pressed that, if that proposal was still unacceptable, there was a case for a fresh enquiry before the proposed legislation was proceeded with. Neither of these suggestions commended themselves to the Union Government who, however, expressed their willingness to give the Government of India an opportunity of placing the case of the Indian Community in South Africa fully before them by offering to take the course of proposing the reference of the Areas Reservation Bill to a Select Committee before, instead of after, the second reading, in order that the Indian objections to the Bill might be heard in respect of its principles as well as of its details. This offer the Government of India accepted, and their deputation appeared before the Select Committee early in March and presented the Indian case against the Bill. Their advocacy was effective and after further correspondence with the Union Government the Government of India suggested that the right method of arriving at a real and effective solution of the Indian question would be for both parties to enter the conference without being committed in advance to any particular solution of the questions at issue. They suggested that the Union Ministers might confer informally with the Leader of the Indian deputation in order to ascertain whether the obstacles in the way of a conference could not be overcome. The suggested conversations took place at Capetown early in April and resulted in a better understanding and appreciation of the respective points of view and difficulties of the two Governments. The Union Government impressed upon the Government of India that public opinion in South Africa would not view with favour any settlement which did not hold out a reasonable prospect of safeguarding the maintenance of western standards of life by just and legitimate means and on this basis agreed to enter a conference the recommendations of which would be subject to confirmation by the Governments of both countries. They also agreed, subject to the approval of the Union Parliament, to postpone further progress with the Areas Reservation Bill until the results of the conference were available. The following formula was accepted by both Governments as the basis on which the conference should be held: "The Government of the Union of South Africa and the Government of India have been further in communication with each other regarding the best method of arriving at an amicable solution of the Indian problem. The Government of the Union have impressed upon the Government of India that public opinion in South Africa will not view with favour any settlement which does not hold out a reasonable prospect of safeguarding the maintenance of Western standard of life by just and legitimate means. The Government of India are prepared to assist in exploring all possible me-

thods of settling the Asiatic question and have offered to enter into a Conference with the Union Government for the purpose. Any proposal that the Conference might make would be subject to confirmation by the Governments of the two countries. The Union Government have accepted the offer of the Government of India and in order to ensure that the Conference should meet under the best auspices, have decided, subject to the approval of the Selected Committee and Parliament, not to proceed further with the Areas Reservation and Immigration and Registration (Further Provision) Bill until the results of the Conference are available."

The reception accorded by Indian opinion to the decision to hold such a conference augured well for its success. At the same time, in order to enable representatives of the various political parties in South Africa to appreciate India's point of view and to strengthen the better understanding created by the visit of the Government of India Deputation to South Africa, the Government of India extended and the Union Government accepted an invitation to send a representative deputation to this country. The deputation arrived in India on the 18th September 1926. They visited almost all the principal towns of India including the Khyber Pass and Landi Kotal and returned to South Africa on the 13th October 1926.

On the 16th October 1926, it was announced that the conference between the representatives of the Union Government and those of the Government of India would take place at Cape Town on the 20th of December. The Government of India Delegation to South Africa consisted of the following :—

(1) Hon'ble Khan Bahadur Sir Muhammad Habibullah, K.C.I.E., KT., Member of Governor General's Council	Leader.
(2) Hon'ble Mr. G. L. Corbett, C.I.E., I.C.S., Secretary to the Government of India in the Commerce Department	Dy. Leader
(3) Right Hon'ble V. S. Srinivasa Sastri, P. C.	Member
(4) Sir D'Arcy Lindsay, KT., C.B.E., M.L.A., ...	"
(5) Hon'ble Sir Phiroze C. Sethna, KT., O.B.E., ...	"
(6) Sir George Paddison, K.B.E., C.S.I., I.C.S., M.L.A., ...	"
(7) G. S. Bajpai, C.I.E., C.B.E., I.C.S., Dy. Secretary to the Government of India in the Department of Education, Health and Lands	Secretary.

The Delegation sailed for South Africa on the 24th November 1926, and reached Cape Town on December 16th. It received a warm welcome on arrival and unstinted hospitality from the Union Government and important public bodies, official and unofficial, European and Indian, during its sojourn in the Union. At the Conference which was opened by the Prime Minister of South Africa, General the Hon'ble J. B. M. Hertzog, on December 17th, the Union Government were represented by: The Hon'ble Dr. D. F. Malan, M.L.A., (Chairman) The Hon'ble F. W. Beyers, K.C., M.L.A., The Hon'ble F. H. P. Creswell, D.S.O., M.L.A., The Hon'ble T. Boydell, M.L.A., Mr. C. F. Schmidt, Mr. H. N. Venn and Mr. H. Pring. Its session lasted till January 13th. A provisional agreement was arrived at between the two delegations and the Indian representatives started on the return journey to India on January 13th to submit the results to the Government of India. The agreement, after ratification by both Governments, was announced in both countries on February 21st.

Both Governments in it reaffirmed their recognition of the right of South Africa to use all just and legitimate means for the maintenance of western standards of life. Here is a summary :—

The Union Government recognises that Indians domiciled in the Union who are prepared to conform to western standards of life should be enabled to do so. For those Indians in the Union who desire to avail themselves of it the Union Government recognise a scheme of assisted emigration to India or other countries where western standards are not required. Union domicile will be lost after three years' continuous absence from the Union in agreement with the proposed revision of the law relating to domicile which will be of general application. Emigrants, under the assisted emigration scheme, who desire to return to the Union within three years will only be allowed to do so on refund to the Union Government of the cost of assistance received by them.

The Government of India recognise their obligation to look after such emigrants on their arrival in India. Admission into the Union of wives and minor children of Indians permanently domiciled in the Union will be regulated by paragraph 3 of Resolution XXI of the Imperial Conference of 1918 which lays down that Indians already permanently domiciled in the other British countries should be allowed to bring in their wives and minor children on condition (*a*) that not more than one wife and her children shall be admitted for each such Indian and (*b*) that each individual so admitted shall be certified by the Government of India as being the lawful wife or child of such Indian.

In the expectation that the difficulties with which the Union has been confronted will be materially lessened by the agreement now happily reached between the two Governments, and in order that the agreement may come into operation under most favourable auspices and have a fair trial the Union Government of South Africa decide not to proceed further with the Areas Reservation and Immigration and Registration (Further Provision) Bill. The two Governments agreed to watch the working of the Agreement reached and to exchange views from time to time concerning any changes that experience may suggest. The Union Government of South Africa also requested the Government of India to appoint an Agent in order to secure continuous and effective co-operation between the two Governments.

Both in the Council of State and the Legislative Assembly supplementary statements explaining the salient points of the Agreement were made by Sir Muhammad Habibullah and Mr. Bhore. In India, the settlement was on the whole well-received. In South Africa the more responsible newspapers, both English and Dutch, *e.g.*, the "Cape Times" and "Die Burger," paid handsome tributes to both

delegations for the statesmanship which they had brought to bear on their work, and the eminently reasonable and practical character of the results achieved by them. The majority of people in both countries doubtless regard it as a good first step in the solution of a complicated problem and the spirit, of which it is the outcome, as the best guarantee of a progressive and friendly adjustment honourable to both parties.

The friendly relations which were happily established between the Government of India and the Union Government of South Africa as a result of the agreement not only continue but have grown in warmth and sincerity. The Government of India sent out as their first Agent in South Africa the Right Hon'ble Srinivasa Sastri, P.C., who was a member of the Government of India's Delegation to the Cape Town Conference. His appointment was received with universal approval both in India and South Africa, the satisfaction felt by the Union Government being indicated by their decision, as an act of grace to make his appointment, to extend an amnesty to all Indians illegally present in the Union. On their part the Union Government after the ratification of the Agreement by the two Governments, lost no time in introducing legislation to give effect to their undertakings under it, so that when Mr. Sastri arrived in South Africa in June last all that remained to be done was to take action under Part III of the Agreement relating to the measures required for the upliftment of the Indian community. Most of the provisions of this part concern the Province of Natal where the bulk of the Indian population of the Union is resident, and the Union Government were not slow in moving the Provincial Administration to appoint a Commission to enquire into the condition of Indian education in that province, and to devise the means necessary for its improvement. Co-operation with this Commission on the part of the Government of India was provided by the Deputation from India of two educational experts—Mr. K. P. Kichlu, I.E.S., Deputy Diretcor of Education in the United Provinces and Miss C. Gordon, B.E., (Edin.) Madras Educational Service, Lecturer in Kindergarten methods at the Government Training College at Saidapet to advise and assist the Commission in its investigations and deliberations.

A notable feature of the present situation is the marked spirit of friendliness and good-will which now animates the Union Government in dealing with all problems affecting the domiciled Indian community. An example of this occurred in the year 1927 when a measure was introduced in the Union Parliament known as the Liquor Bill, clause 104 of which purported to prohibit the employment of Indians on any licensed premises—hotels, clubs, breweries, etc. The appearance of this clause, which threatened the livelihood of 3,000 Indians engaged in such occupations, caused consternation among them and the Minister in charge decided to withdraw the clause from the scope of the Bill.

Much of the credit for the salutary measures referred to and the spirit of friendliness which they denote is due to the Right Hon'ble Mr. Sastri, the Agent of the Government of India in South Africa, whose tact and honesty earned for him the confidence of the European community, offical and non-official alike and an increasing measure of their sympathy and assistance in furtherance of the Indian cause. Gratifying response was made by the Indians to this appeal for £20,000 for the purpose of opening a combined Teacher's Training and High School in Durban, an institution which will meet an urgent need and considerably ease the problem of Indian education in the province. The institution will, when it is erected and equipped, be handed over to the Government of Natal for management. The land for it has been provided by the Borough Council.

(2) **Kenya Colony.**—The grievances of Indians domiciled in this Colony are fully set forth in the published despatch of the Government of India, dated October 21st, 1920. The controversy centred round the following points:—

(*a*) FRANCHISE.—Indians have not the elective franchise. The Government of India proposed that there should be a common electoral roll and a common franchise on a reasonable property basis *plus* an educational test, without racial discrimination for all British subjects.

(*b*) SEGREGATION.—Professor Simpson who was sent to East Africa to report on Sanitary matters, recommended segregation on sanitary grounds. The Government of India objected, firstly, that it was impracticable, secondly, that it was commercially inconvenient; and thirdly, that Indians are in practice unfairly treated in the allocation of sites.

(*c*) THE HIGHLANDS.—Lord Elgin decided in 1908 that as a matter of administrative convenience grants of land in the upland area should not be made to Indians. The whole area has now been given out, and the Government of India claim that there is no land left to which Lord Elgin's decision applies. This decision has now, however, been extended so as to prohibit the transfer of land in the uplands to non-Europeans.

(*d*) IMMIGRATION—Suggestions have been put forward for restricting Asiatic immigration into Kenya. The Government of India claim that there is no case for restricting Indian immigration and that such restrictions would be in principle indefensible.

THE SETTLEMENT.—The decisions of the British Government were contained in a White Paper presented to Parliament in July 1923. It was held that the guiding principle should be that "the interests of the African native must be paramount," and in light of this it was decided:—

(*a*) FRANCHISE.—A communal franchise was adopted with 11 seats for elected Europeans, 5 elected Indians, one nominated Arab, one missionary representing the Africans, and a nominated official majority. One Indian is also appointed on the Governor's Executive Council.

(*b*) SEGREGATION.—The policy of segregation as between Europeans and Asiatics is abandoned.

(*c*) THE HIGHLANDS.—The existing practice is maintained both as regards initial grants of land and transfers. A similar reservation in the low lands is offered to Indians.

(*d*) IMMIGRATION.—Racial discrimination in immigration regulations is rejected. But in the economic interests of the Africans, further control over immigration is necessary. Some arrangement is required for securing a strictly impartial examination of applications for entry into Kenya. The Governors of Kenya and Uganda have been instructed to submit joint proposals for legislation.

The Government of India reviewed their decisions in a resolution published on August 18th, 1923, and recorded " their deep regret that His Majesty's Government did not feel justified in giving greater effect to the recommendations made by them " and reserved liberty to reopen the case on a suitable opportunity. They stated their intention of making representations regarding the action to be taken to implement these decisions, particularly in the matter of the Immigration regulations.

Following upon the Kenya award statutory action was taken by the local administration on the franchise question. Adult sufferage on communal lines was conferred upon Indians. As regards immigration, the Government of India took the opportunity to urge the postponement of the bill giving effect to the decision of His Majesty's Government until such time as the Committee proposed by their representatives at the Imperial conference in 1923 had an opportunity of examining the question of the restrictions therein embodied. Accordingly the introduction of the bill was postponed at the instance of the Colonial Secretary. The Government of Kenya was also asked by His Majesty's Government for an explanatory statement regarding the method proposed for the administration of immigration measures. The Government of India received an assurance from the Colonial Secretary that ample opportunities would be afforded for the expression of their views; and that earnest attention would be given to any representation which their Committee desired to make. As has already been stated such a Committee was appointed in March 1924. The following statement made by the Secretary of State for the Colonies in the House of Commons on 7th August 1924 shows the result of the representation made by the Colonies Committee :—

"(1) IMMIGRATION.—My position is that if danger ever arises of such an influx of immigrants, of whatever class, race, nationality or character, as may likely be prejudicial to the economic interest of the natives, I hold myself entirely free to take any action which may be necessary. Conflicting statistics which have been laid before me have not enabled me to reach a definite conclusion as regards the extent of net Indian immigration. Accordingly steps will be taken to create a statistical department to obtain accurate information with regard to persons of all races arriving in or departing from Kenya. Meanwhile the Kenya Immigration Ordinance will not be enacted.

(2) FRANCHISE.—I have given careful consideration to representations in favour of a common poll, but I am not prepared to resist the conclusion already arrived at that in the special circumstances of Kenya, with four diverse communities, each of which will ultimately require electoral representation, the communal system is the best way to secure the fair representation of each and all of these communities.

(3) HIGHLANDS.—I consider that the Secretary of State for the Colonies has no alternative but to continue pledges, expressed or implied, which had been given in the past, and I can hold out no hope of the policy in regard to agricultural land in the Highlands being reconsidered.

(4) LOWLANDS.—It was proposed to reserve an area in the lowlands for agricultural immigrants from India. The Committee made it plain that it is averse from any reservation of land for any immigrant race, subject to the suggestion that before applications for land in lowland areas are invited an opportunity should be taken of sending an officer experienced in Indian settlement and agricultural methods to report on the areas. At present any consideration of the matter is in suspense pending receipt from the colony of reports from the native and agricultural points of view on the areas in question."

With regard to the announcement in connection with "Lowlands" the question of deputing an officer to examine these areas was considered by the Government of India who thought it inadvisable to proceed any further with the idea.

The work of the Colonies Committee did much to abate the bitterness which existed in the relations between the different classes of settlers in Kenya, and the situation was further improved by the decision of the Indian community to relinquish their attitude of non-co-operation and to select five members for nomination by the Governor to the Legislative Council.

In June 1924, His Majesty's Government announced the appointment of an East African Committee, under the Chairmanship of Lord Southborough, to consider and report on certain questions regarding the administration and economic development of British East African dependencies. Since this enquiry was likely to affect Indian interests, the Government of India urged that the Indian point of view should be heard before the Committee came to any conclusions. This request was granted, but further action in the matter was suspended, pending the publication of the report of the Commission presided over by Major Ormsby Gore, which visited East Africa to enquire into certain aspects of the questions referred to the Southborough Committee. The report of the Ormsby Gore Commission was published in the United Kingdom on May 7th, 1925. On June 9th, Major Ormsby Gore announced in the House of Commons that, in view of the completeness of the report presented by the Commission which, under his chairmanship, had visited East Africa, His Majesty's Government had decided that the Southborough Committee should not resume its sittings.

In November 1926, information reached the Government of India, that the Government of Kenya contemplated undertaking legislation at an early date in order to make the European and Indian communities responsible for the net

cost of their education. It was originally intended to give effect to this decision by levying from Europeans a tax on domestic servants in their employ and from Indians a poll-tax. The Indian community resented this differentiation and, ultimately, the Colonial Government decided that both communities should pay the same form of tax, *viz.*, an adult poll tax. For Europeans this has been fixed at 30 shillings and for Indians at 20 shillings. An Ordinance giving effect to this decision was passed by the Kenya Legislative Council and came into force from 1st January, 1927.

In view of the issue of another White Paper in July 1927, in which it was announced that His Majesty's Government had authorised the Secretary of State for the Colonies to send to Africa a special Commission to investigate the possibility of securing more effective co-operation between the Governments of Eastern and Central African Dependencies and make recommendations on this and cognate matters, the question regarding the position of Indians in Kenya again came to the forefront.

The announcement excited serious apprehensions in India with regard to the future position of Indians in those Colonies. A deputation drawn mainly from both houses of the Indian Legislature also waited on His Excellency the Viceroy on the 17th September 1927, and represented the position of Indians in East Africa. One of the suggestions made by the deputation was that permission may be given for a small deputation appointed by the Government of India to go over to East Africa in order—

(*a*) to make a general survey of these territories in relation to Indian interests therein, and

(*b*) to help the resident Indian community in preparing their evidence for the Commission.

The Government of India readily accepted this suggestion and, with the approval of His Majesty's Government, sent Kunwar Maharaj Singh, C.I.E. and Mr. R. B. Ewbank, C.I.E., I.C.S., to East Africa. These officers visited Kenya, Uganda, Zanzibar and Tanganyika and their services are understood to have been greatly appreciated by the resident Indian communities. The personnel of the Commission was announced by the Secretary of State for the Colonies on November 14th, 1927, and was as follows:—The Right Hon'ble Sir Edward Hilton-Young, P.C., G.B.E., D.S.O., D.S.C., M.P. (*Chairman*), Sir Reginald Mant, K.C.I.E., C.S.I., Sir George Schuster, K.C.M.G., C.B.E., M.C., and Mr. G. H. Oldham, *Members*, with Mr. H. F. Downie, (*Secretary*). The Commission left England on December 22nd, 1927, and travelled *via* the Nile to Uganda, and thence to Kenya, Tanganyika, Zanzibar, Nyasaland, and Northern Rhodesia, visiting the chief centres and hearing the views of representatives of different sections of the community. The Commission also visited Salisbury for the purpose of conferring with the Government of Southern Rhodesia. The report of the Commission was published last winter.

During the year 1927, another matter which engaged Government and the public in India was the report of the local Government Commission which was appointed by the Governor of Kenya in July 1926, to make recommendations as to the establishment or extension of local Government for certain areas in the Colony:—The report of the Commission was submitted to the Governor of Kenya in February 1927. The recommendations made were numerous and so far as Indians were concerned they involved a decrease in the proportion of Indian representation on the local bodies at Nairobi and Mombasa and the creation of an European elected majority in both places. This caused resentment among Indians in the Colony and resulted in the abstention from the Legislative Council of four out of five Indian representatives. The Government of India submitted representations to His Majesty's Secretary of State for India on the subject.

(3). **Fiji and British Guiana.**—Emigration to Fiji was stopped in 1917, under Rule 16 (B) of the Defence of India (consolidated) Rules in pursuance of the general policy of stopping recruitment under the indentured system of emigration. With a view to secure if possible, a renewal of emigration to the Colony, an un-official mission composed of the Bishop of Polynesia and Mr. Rankine, Receiver-General to the Fiji Government, arrived in India in December 1919, and submitted a scheme of colonisation, which was referred to a committee of the Imperial Legislative Council on 4th February, 1920. To secure a favourable reception for the mission the Fiji Government cancelled all outstanding indentures of East Indian labourers from 2nd January, 1920, and also announced their intention to take early measures to provide for the representation of the Indian community on the Legislative Council on an elective basis by two members. In accordance with the recommendations made by the Committee the Government of India informed the mission in March 1920, that they would be willing to send a Committee to Fiji provided that the Government of Fiji and the Secretary of State for the Colonies would guarantee that "the position of the emigrants in their new home will in all respects be equal to that of any other class of His Majesty's subjects resident in Fiji." In July 1920, the Government of Fiji informed the Secretary of State for the Colonies of their willingness to give the pledge, subject to his approval. Arrangements with regard to the contemplated deputation, however, were postponed until January 1921, owing to the announcement of Lord Milner's policy in regard to Indians in Kenya, and the desirability of consulting the new Legislature in India. After consultation with the Fiji Government as to the terms of reference and personnel of the deputation, an announcement was made on the 27th June, 1921. But owing to the inability of the two Indian members Messrs. Srinivasa Sastri and Hirdaynath Kunzru, who had been nominated to join the Committee which as finally constituted consisted of Messrs. Venkatapati Raju, G. L. Corbett, Govind Sahai Sharma, and Lieutenant S. Hissam-ud-din Khan, did not reach Fiji until the end of January 1922.

The labour troubles in Fiji in the years 1920-21 had produced an unexpected result in India. The Government of Fiji cancelled the indentures of Indian labourers, as from January 1920, while arrangements were made for the early repatriation of such of them as desired to return to their own country. In consequence, large

numbers left Fiji. Many arrived in India comparatively destitute ; while others, who were colonial born or whose long residence in the colonies had rendered them unfit for the old social conditions, found themselves utterly out of place—indeed foreigners—in their own country. Returned emigrants from other colonies also, being in difficulties owing to the unfavourable economic situation in India, strongly desired to return to the territories from which they had come. During the early part of 1921, from all parts of India there was a steady drift of destitute and distressed labourers in the direction of Calcutta where they hoped to find ships to take them back to the colonies in which they were certain of work and livelihood. At the earnest representation of the Fiji Government, and after full consultation with representative public men, arrangements were made to relax the emigration restriction in favour of those Indians who were born and had property in any colony, as well as of such near relations as they desired to take with them. Admirable work was done among these distressed persons by the Emigrants Friendly Service Committee which had been formed primarily to deal with the applications of repatriated Indians desirous of returning to Fiji. The Government of India gave discretion to this Committee to permit persons who could prove that they had been in Fiji to return there if they so desired. The local labour conditions stimulated the return of these unfortunate people by giving them assisted passages. The Legislative Assembly had made a grant of £1,000 for the maintenance of these labourers, until such time as they were able to find work and settle down in India. The deputation from India left Fiji on the 3rd April, 1922, and submitted its report to the Government of India. It has not been published.

British Guiana.—The Indian population in this colony belong almost entirely to the labouring classes and their grievances are mainly economic. Towards the end of 1919, a deputation consisting of the Hon'ble Dr. J. J. Nunan, Attorney-General, and Mr. J. A. Luckhoo, a prominent Indian who was a member of the combined court, visited India to put forward a scheme for the colonisation of British Guiana by means of emigration from India. This was examined by a Committee of the Indian Legislature, which advised that a deputation be sent from India to investigate conditions on the spot. Owing to certain unforeseen circumstances it was not found possible to proceed with the proposal until 1922, when a deputation consisting of Messrs. Pillai, Keatinge and Tivary visited British Guiana. Mr. Keatinge was a former member of the Indian Civil Service who had retired from the post of Director of Agriculture, Bombay; Diwan Bahadur P. Kesava Pillai, was an elected member of the Madras Legislative Council of which he was also Vice-President ; and Mr. Tivary was a member of the Servants of India Society who had done considerable amount of Social Welfare Work among the Depressed Classes in the United Provinces. The two reports of the deputation were published on the 21st of January, 1924. Towards the end of the month a deputation from the Colony of British Guiana, consisting of Sir Joseph Nunan, Kt., and the Hon. Mr. J. C. Luckhoo, K.C., arrived in India for further discussions. The Standing Emigration Committee of the Indian Legislature eventually reported that while they would be inclined to view with favour the colonization scheme put forward by the deputation, they would, before making any definite recommendation, like the Government of India to depute an officer to British Guiana to report on certain matter. Kunwar Maharaj Singh, M.A., C.I.E., Bar-at-Law, was deputed for this purpose. He proceeded to that Colony in September 1925. His report was received on February 1st, 1926, and published. He made certain criticisms and suggestions and the whole matter was thus satisfactorily settled. The colonisation scheme has not yet come into operation as the Colonial Government are not in a position at present to afford the cost which it involves.

In March 1928, following special inquiries by the Colonial Office, reports appeared in the press that a bill had been introduced in the House of Commons empowering His Majesty's Government to alter the constitution of British Guiana by Order in Council. The Government of India consulted in the matter the Standing Emigration Committee of the Indian Legislature and are now watching events.

(4) **Other Parts of the Empire.**—In Ceylon, Mauritius, and Malaya, the position of Indians has on the whole been satisfactory, and the matters have gone smoothly. The Government of India have now appointed their own Agents in Ceylon and Malaya. The question of the fixation of a standard minimum wage for Indian state labourers in Ceylon and Malaya has been the subject of negotiations between the Govt. of India and the Colonial Governments ever since the emigration of Indian labour to the Colonies for the purpose of unskilled work was declared lawful in 1923 under the provisions of the Indian Emigration Act, 1922. So far as Ceylon is concerned a settlement satisfactory to the Govt. of India and that of Ceylon has been arrived at, *i.e.*, the standard wage and other outstanding questions affecting the interests of the labourers and the draft legislation to give effect to it was passed by the Ceylon Legislative Council. in December 1927 as "Indian Labour Ordinance No. 27 of 1927." The Standard Rates of Wages agreed upon have been introduced with effect from the 1st January 1929. In regard to Malaya, Standard Wage Rates which are considered suitable by both the Indian and Malayan Governments have been introduced in certain areas and the question of their extension to the rest of Malaya is engaging attention.

In April 1924, the Government of Mauritius requested that emigration to the Colony might be continued for a further period of one year, but the Government of India in consultation with the Standing Committee on Emigration decided that consideration of the request should await the results of a local investigation. The Government of Mauritius agreed to receive an officer for the purpose and to give him all facilities ; and in December, 1924, an Indian Officer of Government, Kunwar Maharaj Singh, left India to conduct the necessary inquiry.

Kunwar Maharaj Singh's report was published by the Government of India in August 1925. The various recommendations made in the report have been commended to the consideration of the Colonial Government.

In February, 1926, the Government of India received a reply from the Colonial Government stating that they accepted the main conclusion formulated by Kunwar Maharaj Singh in regard to the renewal of emigration to Mauritius *viz.*, that no more unskilled Indian labour should be sent to Mauritius either in the immediate or near future. With regard to Kunwar Maharaj Singh's suggestions relating to other matters of interest to the Indian population now resident in the Island, the Colonial Govt. expressed their willingness to give effect to several of them.

The present position of Indians in the Dominions is that under the Canadian Dominion Election Act, Indians domiciled in Canada enjoy the federal franchise in eight out of the nine provinces. In New Zealand, Indians enjoy the franchise on the same footing as all other British subjects. In Australia, a Bill was introduced in the Commonwealth Senate on the 12th June 1925, amending sub-section (5) of section 39 of the Commonwealth Electoral Act, 1918-24, by adding after the word "Asia" the words, "except British India." This measure gives the Commonwealth franchise to subjects of British India at present domiciled in Australia and is the fruition of the hopes held out by the Commonwealth Government to Mr. Sastri on the occasion of his visit to Australia in 1922. The Bill was passed by the Senate and under it the Indians will enjoy both the State and Commonwealth franchise throughout, Australia except in Queensland and in Western Australia where Indians do not enjoy the suffrage in respect of election for the Lower House. By Acts which have recently been passed by the Commonwealth Parliament, British Indians in Australia have been admitted to the benefits of Invalid and Old Age Pensions and Maternity allowances from which they were hitherto excluded as Asiatics. Old Age Pension is payable to men above 65 years of age, or above 60 years, provided such persons are of good character and have resided continously for at least 20 years. An Invalid Pension is obtainable by persons, who, being above 16 years of age and not in receipt of an Old Age Pension, have whilst in Australia, become permanently incapacitated for work by reason of an accident or by reason of being an invalid or blind, provided they have resided continously in Australia for at least five years.

Maternity allowance to the amount of £ 5 is given to a woman of every child to which she gives birth in Australia, provided the child is born alive and the woman is an inhabitant of the Commonwealth or intends to settle there. This Legislation removes the last grievance of the Indian community in Australia which was remediable by the Federal Government. In Western Australia and Queensland they are still subject to certain disabilities of which exclusion from the State franchise, is perhaps, the most important.

Indians in Great Britain.

Nearly seventy years have gone by since the Parsee community, in the persons of the late Dadabhai Naoroji and other members of the firm of Cama & Co., led the way in the sojourn of Indians in England for business purposes. This lead it has since maintained, though there are both Hindu and Mahommedan business men firmly established there. Nor are the professions unrepresented, for there are in London and elsewhere practising barristers, solicitors and medical men of Indian birth. The number of the latter, especially Parsees, is considerable. Three Indians (all belonging to the Parsee community) have sat in the House of Commons. An Indian (Mr. Ameer Ali) was appointed to the Judicial Committee of the Privy Council. In 1910 and another (the first Lord Sinha) in 1926. Three Indians are on the Secretary of State's Council. In 1919 Lord Sinha was the first Indian to be raised to the peerage and to be appointed a member of the Home Government. In the spring of 1923 Mr. (now Sir) Dadiba Dalal was appointed High Commissioner for India being the first Indian to hold the office. He resigned towards the end of 1924 to be succeeded by Sir Atul Chatterjee, previously a member of the Government of India. The early years of the present century saw the gathering of a new Indian element in permanent residence—that of retired officials and business men, or people of independent means who from preference or in order to have their children educated in England, leave the land of their birth and seldom if ever visit it again. Further, the stream of Indian summer visitors includes wealthy people who come regularly. There is an Indian Social Club, founded in 1912, with Sir M. M. Bhownaggree as president, which arranges for dinners and other functions to celebrate Indian festivals or to honour Indian visitors of special distinction. Sectionally, however, the only Indian community to be fully organised is that of the Parsis. They have an incorporated and well-endowed Parsi Association of Europe. The Arya Bhavan, a home for orthodox Hindus visiting London was opened at 30, Belsize Park, Hampstead, in the summer of 1928. Meanwhile Indian business interests had been organised by the formation of the Indian Chamber of Commerce in London, with Offices at 53, New Broad Street, E.C. 2. The British-Indian Union, 10 Grosvenor Gardens, S. W. I.under the presidency of H. R. H. the Duke of Connaught and with Lord Reading as Chairman, is a valuable agency for promoting friendship and understanding between the people of Great Britain and India.

The Indian Pavilion at the British Empire Exhibition in 1924 and 1925 with its gleaming towers and minarets and its cool, fountain-filled forecourt was one of the most conspicuous and admired architectural features of Wembely. The continuous education of visitors in regard

to the products and artwares of India was of great value and did much to spread a vogue for Indian artistic workmanship. This success was one of many considerations leading to the decision to build a permanent India House to be the office of the High Commissioner and where a show of products and artware will replace the small, though choice exhibition of Indian wares at the present office of Grosvenor-Gardens, S.W.1. The building is being erected in Aldwych, near Bush House, to the design of Sir Herbert Baker, A.R.A., and will cover a site of 12,400 square feet. It will house all departments of the High Commissioner's Office, except the Store Department, which is opp. the Thames at Belvedere Road, Lambeth.

The Students.

Under normal conditions it is the student community which constitutes the greatly preponderating element and creates an Indian problem. Its numbers multiplied ten or twelve-fold in the quarter of a century before the war. After a very considerable temporary check caused by the Great War the number rapidly expanded from 1919 in spite of pressure on college accommodation. In addition to the ordinary graduate or under-graduate student, there are some youths of good family, including heirs of Indian States, admitted into our public schools, such as Eton and Harrow. There are over 300 Indians at the Inns of Court. Since the war there has been a welcome increase in the number of technical and industrial students. Altogether including technical and medical students, there are fully 2,000 young Indians (some five per cent. of them women) in London, Edinburgh, Cambridge, Oxford, Glasgow, Manchester, Birmingham, Leeds, Sheffield, Liverpool and a few other centres. London absorbs about half the total.

The Advisers.

It is well known that until a few years ago the young Indian apart from inadequately supported unofficial effort and the chance of coming under the influence of English friends of their families, were practically left to their own devices. But in April 1909 Lord Morley, created for their benefit a Bureau of Information and appointed Dr. (now Sir) T. W. Arnold to the charge of it under the title of Educational Adviser. The Bureau was located at 21, Cromwell-road, together with the National Indian Association and the Northbrook Society, which were thus given spacious quarters for their social work among the young men. (For Burmese students distinct club accommodation is provided, partly by subventions from Indian revenues, in the commodious Albion House, St. Peter's Square, Hammersmith, W. 6.) In India provincial advisory committees exist to help and advise intending students, but in some instances have been replaced by University Committees. The work of the Bureau rapidly expanded, and in consequence Lord Crewe in 1912 re-organised the arrangements under the general charge of a Secretary for Indian students, Mr. (now Sir) C. E. Mallet who resigned at the close of 1916. He was succeeded by Dr. Arnold under the designation of Educational Adviser for Indian Students to the Secretary of State. Mr. N. C. Sen followed Dr. Arnold as Local Adviser in London. At Oxford, the Oriental Delegacy, and at Cambridge, the Inter.-Collegiate Committee have been instituted to deal with Oriental students generally; whilst Local Advisers for Indian students have been appointed at Manchester, Edinburgh and Glasgow.

These arrangements underwent far-reaching revision in the autumn of 1920 in connection with the setting up, under the Act of the previous year of a High Commissionership for India in the United Kingdom. The "agency work" Sir William Meyer, took over from the Secretary of State included that connected with Indian students. Sir T. W. Arnold accepted an appointment long pressed upon him as Professor of Arabic at the School of Oriental Studies, and the High Commissioner appointed Mr. N. C. Sen and Dr. Thomas Quayle at Joint Secretaries for the Education Department. The administrative work hitherto divided between the India Office and 21, Cromwell-road, was consolidated at the offices of the High Commissioner, thereby obviating a good deal of duplication of files and papers.

The whole situation was investigated by a committee of inquiry which sat in 1921 under the chairmanship of Lord Lytton. Arrangements had been made for the Committee to continue their investigations in India in the cold weather of 1921-22, but were abandoned in consequence of the refusal of the Legislative Assembly to vote the necessary grant. This largely accounts for the somewhat tentative form of the recommendations of the unanimous report published in October 1922. The opinion was expressed that the only permanent solution of the problem is to be found in the development of education in India. Attention was invited to the diminution of the number of Indian students proceeding abroad that would result from giving effect to recommendations made for such development by previous commissions, and by the establishment of an Indian Bar. The Committee held that it should be possible to secure admission both to British universities and, subject to certain reservations, to the works of manufacturing firms in Great Britain for all Indian students competent to profit by the facilities afforded, provided that some machinery existed to ensure their distribution to the places best suited to their requirements. Subsequently a committee presided over by Sir Edward Chamier recommended the creation of Indian Bars, which should have the effect of much reducing the number of Indians going to the Inns of Court. An Act for the purpose was passed by the Indian Legislature in 1926.

The students have hosts of non-official friends and helpers and the report suggested that there should be a conference of representatives of all organisations interested in the social and intellectual welfare of young Indians in Great Britain to discuss the best means for co-ordinating their efforts. Accordingly the High Commissioner held a conference in July 1925, when plans were formulated to help to meet the needs of students more particularly in respect to suitable boarding accommodation in London: The subject had been previously discussed at a

meeting of the East India Association (April 27, 1925) when a paper was read by Mr. F. H. Brown. The conference came to the conclusion that, since non-official effort admittedly does not meet the need fully the hostel and club at 21, Cromwell-Road should be maintained, more particularly to provide accommodation for new comers. A small committee with Mr. A. D. Banerjee (Warden of 21, Cromwell-Road) as Secretary was established to assist students in obtaining suitable accommodation.

Under the presidency of Lord Hawke an Indian Gymkhana Club in 1921 acquired its own sports ground at Osterley, the total cost of purchase and equipment being estimated at £15,000. Generous gifts were made by some Ruling Princes and others, particularly the Maharaja of Patiala, but further help is required. The cricket eleven of the Club has an excellent record in matches at Lords and the Oval and with suburban clubs.

A notable development of 1920 was the opening of the "Red Triangle" Shakespeare Hut in Bloomsbury, off Gower Street, as a union and hostel for Indian and Ceylonese students up to the number of 500. The hostel was removed to permanent premises 106-112, Gower-street, close to University College in the autumn of 1923. It is Indian both in conception and control, the warden Mr. P. D. Runganadhan, and committee being responsible not to the National Council of Y. M. C. A. in London but to the Indian National Council in Calcutta. While the organization has a definitely moral and spiritual, as well as a social purpose, it is not a proselytising agency. There is a steady average of some 550 members, and the hostel is exceptionally fortunate in securing the voluntary services of men and women of great distinction in many fields for the regular Sunday afternoon and other lectures. The cost of building and furnishing has been met and the question of extending the hostel accommodation is under consideration.

Societies: Literary, Scientific and Social.

Agricultural and Horticultural Society of India (Calcutta).—Founded 1820. A Class Annual subscription Rs. 32. Entrance fee Rs. 8. B Class Annual subscription Rs. 12. *Secretary*: S. Percy-Lancaster, F.L.S., F.R.H.S., M.R.A.S. 1, Alipore Road, Alipore.

Agri-Horticultural Society of Burma.—*Superintendent*, C. A. Giffening, Agri-Horticultural Gardens, Kandawglay, Rangoon.

Agri-Horticultural Society of Madras.—Established 1835. Quarterly subscription for members in Class A Rs. 7, in Class B Rs. 3. *President:* H. E. The Rt. Hon. Viscount Goschen: *Chairman:* The Hon. Justice Sir William Phillips, Kt., I.C.S. *Hon. Secretary:* Mr. H. A. B. Vernon, I.C.S. *Hon. Treasurer:* Dewan Bahadur G. Narainaswamy Chetty Garu, Teynampett, S.W., Madras. *Nursery Superintendent:* Mr. N. Ramalingam Naiker. *Foreman, Ornamental Garden*: Mr. N. Munisawmy Naiker.

Anglo-Indian League.—To protect the interests of Anglo-Indians. *President:* Dr. H. W. B. Moreno, PH.D. *Honorary Secretary:* Dr. I. H. James. *Hon. Treasurer:* Mr. S. V. Cowen. *Office:* i 2, Wellesley Square, Calcutta.

Anthropological Society of Bombay.—Founded 1886, to promote the prosecution of Anthropological research in India; to correspond with Anthropological Societies throughout the world; to hold monthly meetings for reading and discussing papers; and to publish a journal containing the transactions of the Society. Annual subscription Rs. 10. *President:* Shams-ul-Ulma Dr. Jivanji Jamshedji Modi, B.A., Ph.D., C.I.E., 172, Hornby Road, Bombay. *Hon. Secretary:* Principal J. McKenzie, M.A.

Benares Mathematical Society.—Founded in 1918 for the encouragement and promotion of research in the various branches of Pure and Applied Mathematics, and in the History of Mathematics. It conducts a journal "The Proceedings of the Benares Mathematica Society" in which original papers on Mathematics are published and maintains a library. There are about 60 members from all parts of India. Admission fee Rs. 10. Annual subscription Rs. 12 (resident members) and Rs. 5 (non-resident members). *Patron*: Sir William Marris, K.C.S.I., K.C.I.E. *Life President:* Dr. Ganesh Prasad, M.A. (Cantab), D.Sc. *Secretary:*

Prof. Chandi Prasad, M.A., B.Sc. *Treasurer:* Prof. Pashapati Prasad, M.A., B.Sc.

BHANDARKAR ORIENTAL RESEARCH INSTITUTE, POONA.—The Institute was inaugurated on the 6th of July 1917, the 80th birthday of late Sir R. G. Bhandarkar, at the hands of H. E. Lord Willingdon, who became its first President. Its objects are to publish critical editions of texts and original works bearing on Oriental Antiquities, to provide an up-to-date Oriental Library, to train students in the methods of research and to act as an information bureau on all points connected with Oriental Studies. The valuable library of the late Dr. Sir R. G Bhandarkar which he had bequeathed already to the Institute was handed over after his demise by his executors to the Institute and is now located in the Central Hall of the Institute. Since the 1st of April 1918 the Government of Bombay have transferred to the custody of the Institute the unique collection of nearly 20,000 manuscripts at the Deccan College together with a maintenance grant of Rs. 3,000 a year. Government have likewise entrusted to the Institute a grant of Rs. 12,000 a year for the publication of the Government Oriental Series. The Institute has undertaken to edit the *Mahabharata* critically at the request of the Chief of Aundh who has promised a grant of Rs. 5,000 annually for that purpose. Grants are being received from the University of Bombay, and the Governments of Bombay, Burma, Baroda and Madras. The Institute has a journal called "Annals of the Bhandarkar Institute" published four times a year. It also held under its auspices the First Oriental Conference on the 5th, 6th and 7th of November 1919 under the patronage of H. E. Sir George Lloyd and the presidency of Sir R. G. Bhandarkar. Owing to liberal donations from the Tatas and the Jain community, the Institute is housed in a fine building near the hills behind the Home of the Servants of India Society. Minimum membership dues Rs. 10 a year or Rs. 100 compounded for life. Members can, subject to certain conditions, borrow books from the library and get the Journal free and other publications at concession rates. *Secretary*: Dr. S. K. Belvalkar, M.A., Ph.D. (Harvard).

BOMBAY ART SOCIETY.—Founded 1888; to promote and encourage Art by exhibitions of Pictures and Applied Arts, and to assist in the establishment and maintenance of a permanent gallery for pictures and other works of Art. Annual exhibition usually held every January. Annual subscription Rs.10 ; Life member Rs. 100. *Secretary*: S. V. Bhandarkar, Bandra, Bombay.

BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY.—Founded 1804, to investigate and encourage Oriental Arts, Sciences and Literature. Annual subscription Rs. 60. *Secretary:* Dr. Edward Parker, Town Hall, Bombay.

BOMBAY NATURAL HISTORY SOCIETY. (Registered under Act XXI of 1860.)—Founded 1883 to promote the study of Natural History in all its branches. The Society has a membership of about 1,700 and a museum with a representative collection of the different vertebrates and invertebrates found in the Indian Empire and Ceylon. In 1921 the Society was entrusted with the management of the Natural History Section of the Prince of Wales Museum, and a great part of the Society's collections have been transferred to that Museum. A Journal is published quarterly which contains articles on natural history and sport as well as descriptions of new species and local lists of different orders. The Society's library is open to members and books may be borrowed under special arrangement by members residing in the mofussil. The Society's Taxidermist Department undertakes the curing and mounting of trophies for members. Annual subscription Rs. 25. Entrance fee Rs. 20. *Patrons:* H. E. The Viceroy of India H. R. H. the Prince of Wales. *Vice-Patron:* H. H. The Maharao of Cutch, G.C.S.I., G.C.I.E., H. H. the Maharaja of Jodhpur, K.C.S.I., K.C.V.O., H. H. the Maharaja of Rewa, K.C.S.I., H. H. The Maharani of Dhar, and Mr. F. V. Evans, Liverpool; Sir David Ezra, Kt., A. S. Vernay, Esq., London. *President:* H. E. The Rt. Hon. Sir Leslie Wilson, P.C., G.C.I.E., C.M.G., D.S.O. *Vice-Presidents:* The Hon. Mr. J. E. B. Hotson, C.S.I., I.C.S., and H. H. The Maharao of Cutch, G.C.S.I., G.C.I.E., Rev. E. Blatter, S.J., PH.D., F.L.S. *Honorary Secretary:* Sir Reginald Spence, Kt., F.Z.S. *Curator:* S. H. Prater, C.M.Z.S. *Asstt. Curators:* C. McCann, Salim A. Ali, M.B.O.U., V. S. La Personne. *Head Clerk:* Mr. A. F. Fernandes. *Offices:* 6, Apollo Street, Bombay.

BRITISH AND FOREIGN BIBLE SOCIETY.—Since 1811 the British and Foreign Bible Society has been at work in this country. It has 6 Auxiliaries in India and an Agency in Burma. The first Auxiliary was established in Calcutta, in 1811, then followed the Bombay Auxiliary in 1813, the Madras Auxiliary in 1820, the North India Auxiliary in 1845, the Punjab Auxiliary in 1863, the Bangalore Auxiliary in 1875, while the Burma Agency was founded in 1899. The Bible or some portion of it is now to be had in nearly 100 different Indian languages and dialects and the circulation throughout India and Burma reached nearly 8,00,000 copies in 1924. The Bibles, Testaments, and Portions in the various vernaculars are sold at rates which the very poorest can pay, and at considerable loss to the Society. Grants of English Scriptures are made to Students who pass University examinations, as under:—

The New Testament and Psalms to Matriculates.

Portions of Scriptures in the important vernaculars have been prepared in raised type for the use of the Blind and large grants of money are annually given to the different Missions, to enable them to carry on Colportage and Bible Women's work. Besides the British and Foreign Bible Society, there is Bible work carried on in India, and Burma in a much smaller way by the Bible Translation Society—which is connected with the Baptist Missionary Society—the National Bible Society of Scotland, the American Bible Society and the Tranquebar Tamil Bible Society.

The following table shows the growth in the British & Foreign Bible Society's work during the past few years in India and Burma :—

TABLE OF CIRCULATION OF THE B.F.B.S. IN INDIA.

Auxiliaries.	1925.	1924.	1923.	1922.
Calcutta	122,781	107,084	148,026	111,567
Bombay	164,820	161,263	133,608	181,388
Madras	238,371	215,247	231,681	249,676
Bangalore	30,315	29,088	45,099	35,866
North India	133,238	144,930	191,692	168,091
Punjab	81,593	61,781	65,578	71,369
Burma	71,328	63,472	65,832	68,306
Total copies of Scriptures ..	842,446	782,865	881,516	886,978

These returns do not include the copies which any Auxiliary has supplied to London or to other Auxiliaries and agencies during the year.

BRITISH INDIAN PEOPLES' ASSOCIATION.—To protect the interests of Domiciled Europeans, Anglo-Indians and Indians alike. *President:* Raja Rishee Case Law, C.I.E., M.L.C. *Joint Hony. Secretary:* Dr. H. W. B. Moreno, Ph-D. *Office:* 2, Wellesley Square, Calcutta.

BRITISH MEDICAL ASSOCIATION (Bombay Branch).—Founded 1886, to promote Medical and the Allied Sciences and the maintenance of the honour and interests of the Medical Profession. *Secretaries:* Dr. B. B. Yodh, Sandhurst Building, Sandhurst Road, Bombay; and Dr. F. D. Bana.

BOMBAY MEDICAL UNION.—Founded 1883 to promote friendly intercourse and exchange of views and experiences between its members and to maintain the interest and status of the medical profession in Bombay. The entrance fee for Resident members Rs. 5, monthly subscription Rs. 2, Absent members Re. 1, and non-resident members yearly subscription Rs. 5. *Hon. President:* Dr. V. Bhajekar *Hon. Vice-Presidents:* Dr. S. H. Banker and Dr. Deshmookh. *Hon. Librarians:* Dr. S. Popat and Dr. Lam, R.C. *Hon. Treasurer:* Dr. P. T. Patel. *Hon. Secretaries:* Dr. S. P. Kapadia and J. E. Spencer, Top Floor, Alice Building, Hornby Road, Bombay.

BOMBAY SANITARY ASSOCIATION.—Founded to create an educated public opinion with regard to sanitary matters in general; (b) to diffuse the knowledge of sanitation and hygiene generally, and of the prevention of the spread of disease amongst all classes of people by means of lectures, leaflets and practical demonstrations and, if possible, by holding classes and examinations; (c) to promote sanitary science by giving prizes, rewards or medals to those who may by diligent application add to our knowledge in sanitary science by original research or otherwise; (d) to arrange for homely talk or simple practical lectures for mothers and girls in the various localities and different chawls, provided the people in such localities or chawls give facilities. The Sanitary Institute Building in Princess Street, which has lately been built by the Association, at a cost of nearly Rs. 1,00,000 the foundation stone of which was laid by Lady Willingdon in March, 1914, and opened in March, 1915, is a large and handsome structure with a large Lecture Hall, Library, Museum, etc., and also provides accommodation for King George V. Anti-Tuberculosis League Dispensary transferred to the Municipality in 1924 and Museum and the office of the Assistant Health Officer, C and D Wards, and the Vaccination Station. *Hon. Secretary,* Dr. J. E. Sandilands, M.C., M.A., M.D., Executive Health Officer, Bombay.

CALCUTTA CHESS SOCIETY.—To encourage Chess and Chess contests, open to all. *President:*—The Hon'ble Mr. Justice M. N. Mukerji, M.A., B.L. *Vice-President:* Dr. H. W. B. Moreno, *Hon. Secretary:* D. Dhara. *Hon. Treasurer:* B. B. Ghosh, 93, Lower Circular Road, Calcutta.

EUROPEAN ASSOCIATION.—The European Association was established in 1883 under the title of the European and Anglo-Indian Defence Association and was re-established in 1912 under the title of the European Defence Association, but the present title was adopted in 1913. The Association has for its major object the organisation of European

influence in the political life of India. The Head Offices (Central Administration) are at 17, Stephen Court, Park Street, Calcutta. *President*, Mr. C. B. Chartres. *Vice-Presidents:* The Hon. Sir Arthur Froom, Kt. and Mr. T. D. Edelston: *General Secretary*, Colonel J. D. Crawford, D.S.O., M.C., M.L.A.; *Asst. General Secretary*, Miss L. I. Lloyd: *Hon. General Treasurer*, Mr. C. S. Cooper: *Publication*, "The Review of India", obtainable from any Branch or from the General Secretary.

BRANCHES OF THE EUROPEAN ASSOCIATION.—

ASSAM.—*Chairman*, Col. W. D. Smiles: *Secretary*, C. Buckingham Jones. Bengal, Eastern. *Chairman*, R. R. Beamish, *Secretary*, L. K. Nixon.

BIHAR, NORTH.—*Chairman*, J. B. Norman, *Secretary*; W. H. Meyrick

BENGAL, WESTERN.—D. M. Archibald. *Secretary*, W. V. Curtain.

BOMBAY.—*Chairman*, J. E. Needham. *Secretary*, A. Parry.

CHITTAGONG.—S. A. Hollingsworth. *Secretary*, C. Brian Boys.

DARJEELING.—*Chairman*, Major J. C. Little; *Secretary*, R. S. Hutchinson.

DOOARS.—*Chairman*, W. L. Travers C.I.E., O.B.E., M.L.C.; *Secretary*, A. Johnson.

KANKINARRAH.—*Chairman*, A. K. Thomas; *Secretary*, W. G. Kidd.

MADRAS.—G. W. Chambers, M.L.C.; *Secretary*, J. K. Metherell.

MANBHUM.—*Chairman*, T. C. Murray; *Secretary*, B. Wilson Haigh, M. I. Chem.

MOULMEIN.—*Chairman*, W. A. W. Dawn; *Secretary*, L. E. C. Everard.

PUNJAB.—*Chairman*, Owen Roberts, *Secretary*, Major R. Corridon, M.V.O., M.B.E.

SIND.—*Chairman*, C. S. W. Stanley. *Secretary*, G. Jacob.

SYLHET.—*Chairman*, W. E. Mackenzie; Hill. *Secretary*, W. B. Culbard.

CACHAR.—*Chairman*. T. A. Everard. *Secretary*, T. A. Everard.

UNITED PROVINCES.—*Chairman*, J. G. Ryan, M.B.E. *Secretary*, H. B. Hawkins.

TRICHINOPOLY.—*Chairman*, R. H. Martin. *Secretary*, R. H. Martin.

CALCUTTA.— *Chairman*. W. H. Thompson M.L.C. *Secretary* Miss L. I. Lloyd.

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE (Calcutta).—*Honorary Secretary*, Prof. C. V. Raman, M.A., D.Sc., F.R.S., 210, Bow Bazaar Street, Calcutta.

INDIAN CHEMICAL SOCIETY.—Was founded in 1924 with Sir P. C. Ray as *President*, and Professor J. N. Mukherjee, 92, Upper Circular Road, Calcutta, as *Secretary*. *Bombay Members of the Council*, Dr. A. R. Normand (Wilson College) and Dr. A. N. Meldrum (Royal Institute of Science). Bombay Branch of the Indian Chemical Society. *President:* Dr. A. N. Meldrum; *Vice-Presidents:* Dr. A. R. Normand and Rev. Fr. J. F. Caius. *Joint Secretaries*: Dr. Mata Prasad and Mr. R. N. Bhagvat. *Treasurer:* K. B. Dr. A. K. Turner. *Members of the Executive Committee:* Dr. S. A. Kamat, Dr. N. F. Vajifdar and Mr. E. J. M. Hudson.

INDIAN INSTITUTE OF POLITICAL AND SOCIAL SCIENCE.—Founded on 30th March 1917 to promote a systematic study of political and social science in general and Indian political and social problems in particular in all their aspects taking the terms 'political' and 'social' in their widest sense; to organise free and well-informed discussions on current political and social topics as well as on abstract political and social questions; to formulate considered views on current political and social questions; to publish literature and make representations from time to time on questions arising or necessary to be raised in the interest of the public; and to form and maintain a library for the promotion of the above objects. Office: Servants of India Society, Sandhurst Road, Girgaum, Bombay. *President*, K. Natarajan, Esq., B.A. *Secretaries*, Dr. B. R. Ambedkar, M.A., PH.D., D.SC.(Econ.), London, Bar-at-Law, and Mr. S. G. Warty, M.A.

INDIAN MATHEMATICAL SOCIETY.—Founded in 1907 for the advancement of Mathematical studies in India. It conducts a bi-monthly journal in which papers on mathematical subjects are published and maintains a library with current mathematical periodicals in all languages and new books on the subject. The library is located in the Fergusson College, Poona, whence the journals and books are circulated to members by post. The journal of the Society is published in Madras. There are about 225 members from all parts of India. *President*, V. Ramaswami Aiyar, M.A., Deputy Collector, Chittoor. *Secretaries*, Prof. M. T. Naraniengar, Bangalore and Prin. N. M. Shah, Poona. *Librarian*, Prof. V. B. Naik, Poona.

INDIAN ROADS AND TRANSPORT DEVELOPMENT ASSOCIATION, LTD.—The Association was formed in 1926 and registered in October 1927, and is conducted on similar lines to the European Association with a Council having Headquarters in Bombay. The subscriptions for membership of the Association are Rs. 10 (Life Membership) and Re. 1 annual subscription.

The aims and objects of the Association are to promote the cause of Road Development throughout India by making representations to the Government of India, Government of Provinces, District Boards and other public bodies concerned, regarding the construction, improvement and maintenance of Roads and Bridges and the improvement of methods of transport; to make representations to all or any of the bodies regarding the adjustment of taxation, customs duties and excise affecting motor vehicles and other modes of transport and employment of same, in such manner as

to facilitate the development of Road Transport throughout India; to educate the public by means of propaganda work and to create authoritative public opinion with regard to the needs of, and advantages to be derived from improved road communications. All persons, firms or companies interested in Road and Transport problems are eligible for election as members.

The Council consist of the following Members—H. E. Ormerod, (President); Sir N. N. Wadia, K.B.E., C.I.E., (Vice-President); E. Miller, M.L.C., R. Ricardo; S. Guevrek; Sir Hugh Cocke, M.L.A., and G. H. Cooke, representing Madras Branch. Secretary and Treasurer—W. Chubb,

Branches are already in existence in Bombay, Calcutta, Madras, Karachi and Assam, and others are being formed in important centres.

INDIAN SOCIETY OF ORIENTAL ART (Calcutta.)—*President*, Sir Rajendra Nath Mookerjee, K.C.I.E.; *Vice-President*, Mr. O. C. Gangoly, Solicitor. Editor "*Rupam*"; *Joint Hon. Secretaries*, C. W. E. Cotton, and G. N. Tagore; *Assistant Secretary*, P. Chatterjee, *Hon. Treasurer*, Rai Fanindra Lal De, Bahadur. *Office*—6A, Corporation Street, Hindusthan Buildings, First-floor, Calcutta.

THE INDIA SUNDAY SCHOOL UNION.—The India Sunday School Union is an interdenominational organisation having for its object the strengthening of religious and moral education throughout the Indian Empire. It embraces a Score of Auxiliaries, which are generally associated with language areas. There is a number of full-time workers, European and Indian, but much help is given in all parts of the organisation by honorary helpers.

The I. S. S. U. was founded in Allahabad in 1876. Its general committee is made up of representatives from the National Christian Council of India, from the auxiliaries, and from other sources. Funds for the carrying on of the work are partially found in India, but the major part is still provided by The World's Sunday School Association. The headquarters of the Union is at Coonoor in the Nilgiri Hills where besides the office and well-stocked book shop there is The St. Andrew Teacher Training Institution. In this Institution's leaders in religious education from all parts of India are trained for their duties.

Besides the central training college the chief activities of the Union are the providing of literature for the religious educational needs of India, good literature for teachers and for children, extension courses of lectures delivered in English or vernaculars in all parts of the Empire, the arranging of teachers' conventions and conferences, the arrangement of examinations in Scripture for teachers and scholars in the Sunday Schools.

The following journals and quarterlies are published by the I. S. S. U.:—

The India Sunday School Journal,

The Senior Lesson, Quarterly,

The Junior Lesson, Quarterly,

Senior Scholars' Self-Teaching Quarterly.

Approximately a million scholars in Sunday Schools and Day Schools are touched by the activities of the Union, and 60,000 to 70,000 teachers.

The officers of the I. S. S. U. are—*President*—Bishop J. W. Robinson, Delhi; *Treasurer*—W. H. Warren, Madras; *General Secr tary*—E. A. Annett, Coonoor.

INSTITUTION OF ENGINEERS (INDIA).—The organisation of the Institution commenced in 1919 and it was inaugurated by H. E. Lord Chelmsford early in 1921. Its object is to promote and advance the science, practice and business of engineering in India on the same lines as are adopted by the Institutions of Civil, Mechanical and Electrical Engineers in the United Kingdom. The standard of qualification is the same. Membership is divided into three classes, *viz.*, Members, Associate Members and Associates, and there is an additional class for students. *President*, J. S. Pitkeathly, C.I.E., C.V.O. D.S.O. *Secretary*, F. Powell Williams. *Offices*—8, Esplanade Row, East P. O. Box 669, Calcutta.

MADRAS FINE ARTS SOCIETY.—*Patron*, H. E. the Rt. Hon. Viscount Goschen; *President*, The Hon. Mr. Justice E. H. Wallace; *Secretary*, P. F. Fyson, Chepauk, Presidency College, Madras.

MADRAS LITERARY SOCIETY AND AUXILIARY OF THE ROYAL ASIATIC SOCIETY.—*Secretary*, B. W. Batchelor Messrs. Binney & Co., Madras.

NATIONAL HORSE BREEDING AND SHOW SOCIETY OF INDIA.—Formed in 1923. Objects: To form a national body of public opinion on horse-breeding matters; to encourage and promote horse-breeding in India; to protect and promote the interests of horse-breeders and to give them every encouragement; to improve and standardise the various types of horses bred in India; to prepare an Indian stud book; and to promote uniformity in all matters connected with horse shows in India. *Patron-in-Chief*:—H. E. The Viceroy, *President*, Colonel E. Hearle Cole, C.B., C.M.G., Coleyana, Montgomery District, Punjab; *Secretary*, Major-General Sir Bernard James, C.B., C.I.E., M.V.O. The Society issues the following publications: An Illustrated Quarterly Journal in English and Urdu, Stallion Register and Supplement, Indian Stud Book, Record of Country Bred Racing, Ahmednagar Stud Book, Show Judging Pamphlet. The Society holds The Imperial Delhi Horse Show Annually in February. *Registered Office*—Remount Camp, Kingsway, Delhi.

NATIONAL INDIAN ASSOCIATION.—Founded in 1870. Its objects are:—(*a*) To extend in England, knowledge of India, and interest in the people of that country. (*b*) To co-operate with all efforts made for advancing Education and Social reform in India. (*c*) To promote friendly intercourse between English people and the people of India. In all the proceedings of the Association the principle of non-interference in religion and avoidance of political controversy is strictly maintained. It has branches in Bombay, Madras, Ahmedabad, Nagpur, Calcutta, Rangpur and Lahore.

Hon. Secretary, Miss Beck, 21, Cromwell-road, London. Publication, *The Indian Magazine and Review*, (8 members a year) which chronicles the doings of the Association in England and in India, and takes note of movements for educational and social progress. It publishes articles about the East to interest Western readers, and articles about the West to interest readers in the East. *Life Members*—Ten Guineas. Annual Subscriptions: Members, one Guinea; County Members, Ten shillings; Associates Students, Seven shillings and Six pence.

PASSENGERS' AND TRAFFIC RELIEF ASSOCIATION. (Established in 1915). *Head Office*—139, Medows Street, Fort, Bombay. Objects: (*a*) To inquire into and ascertain grievances with respect to passengers in India generally. (*b*) To petition Government, Local bodies, Railway, Steamers and other companies carrying passengers and traffic; to take all proper and necessary steps to obtain redress with regard to the said grievances. (*c*) To hold periodical meetings and discuss questions relating to grievances. (*d*) To start branch offices throughout India, and to affiliate societies and bodies having objects similar to this Association. (*e*) To start a fund to meet expenses for carrying out the objects of the Association. *President*—Meyer Nissim, Esquire, M.A., *Vice-Presidents*—L. R. Tairsee Esquire, B.A., Lachmandas Daga, Esquire. *Hon. Secretaries*—Jivraj G. Nensey, Esquire, Khan Bahadur P. E. Ghamat. *Assistant Secretary*—Pestonji Jamsetji, Esquire.

PHILATELIC SOCIETY OF INDIA.—Formed March 1897; Annual subscription Rs. 15. *Secretary*, Jno. Godinho, 15, Burrow's Street, Bombay.

PHOTOGRAPHIC SOCIETY OF INDIA (Calcutta): —Annual subscription Rs. 30 (Town Members) and Rs. 15 (Mofussil members). Entrance fee Rs. 20 and Rs. 10. The Society is affiliated to the Royal Photographic Society of Great Britain, London and holds annual exhibitions, distributes a monthly journal to members, and undertakes developing, printing and enlarging work from its members only. There are excellent work-rooms apparatus and reading room at the Society's Headquarters at 229, Lower Circular Road, Calcutta. *Hon. Secretary:* A. Hearn, 229, Lower Circular Road, Calcutta.

POONA SEVA SADAN SOCIETY.—This Institution was started in 1909 by the late Mrs. Ramabai Ranade, Mr. G. K. Devadhar and a few other ladies and gentlemen in Poona and registered in 1917. It is now working independently though for a few years in the beginning it was conducted as a branch of the Bombay Seva Sadan. Its main object is to make women self-reliant and to train them for missionary work undertaking educational and medical activities for their sisters and brethren, especially the former in backward areas and working on a non-sectarian basis. Nominal fees are now being charged for instruction, except for the Music Classes, for Special Classes in English, and for High School classes, etc. There are eight different departments subdivided into 60 classes. Arrangements are made for training Nurses and Midwives and women Sub-Assistant Surgeons at the Sassoon Hospital, Poona, and a hostel is maintained for the former and two for those attending the Sub-Assistant Surgeon's Classes. There is a Public Health School affiliated to the Lady Chelmsford League for Maternity and Child Welfare, Delhi. The number in these three hostels is now about 85. Besides there is a full-fledged Training College named after Bai Motlibai Wadia with about 46 students excluding those in the V. F. Class for being trained as Mistresses for Vernacular schools. This College is probably the only college in India maintained by a non-official, non-Christian missionary body teaching the full course. The results of the Certificate Examinations held in the year 1927-28 under the authority of the local Government Training College for Women were as follows: I year senior 12. The total number of certificates granted so far is 347 now. The Practising School for little girls attached to the Training College has now eleven classes with 265 students reading up to the Marathi VI Standard, English being taught in the V standard class. Primary Classes for grown up women teaching up to the Marathi V Standard are attended by about 105 women. It is here that poor women are recruited for training as a teacher, nurse, midwife, or doctor. Special classes for teaching English, First Aid, Home Nursing were attended by about 93 students; the Music Classes by 112 students, and the Work room Classes for teaching Sewing, Embroidery, Hosiery and Weaving by 158 women. Thus, the total number of pupils is 984 to-day. There are two branches of the Society started at Satara and Baramati which are named after Lady Vithaldas Thakersey, the wife of the greatest helper of the Society so far, the late Sir Vithaldas D. Thakersey. Besides there are branches started at Bombay (Dadar and Girgaum), Sholapur, Ahmednagar, Alibag, Nasik, Nagpur, Gwalior and Madras for either educational or medical work or for both. Thus the total number of women and girls including about 150 duplications on the rolls at these various Centres of the Society is over 1,500. There are in Poona six hostels, three of which are located at the headquarters and the other three in the Raste's Peth and the Somwar Peth for Nurses, etc., under training at the Sassoon Hospital. The number of resident students is above 260 in these six hostels. One of the three hostels at the headquarters is intended for women of depressed classes. The number of these women at present is 7. In connection with the medical branch a Committee has been formed in England, which will enable the Society to send fully qualified Nurses there to undergo further training. Two fully qualified Nurses have so far been sent by the Society for their post graduate course in Public Health Nursing at Bedford College for women, London, with the partial help of a scholarship of the League of Red Cross Society, Paris. There is an active Infant Welfare centre and ante-natal clinics with the average daily attendance of 50 excluding expectant mothers.

The Society has extended its medical activities in Bombay by undertaking, with the help of two charitable Trusts in Bombay, to

work out the scheme of Maternity, Infant Welfare, Child Welfare and General Nursing for the women and children of the Bhatia Community under the supervision of Mr. G. K. Devadhar, the organiser of the society. This scheme has a Maternity Hospital and Nursing Home, and three Infant Welfare centres. Besides, there are Maternity Hospitals and Nursing Homes at Ahmednagar, Alibag, Nasik. and Sholapur under the management of the society in connection with other organizations. Now Her Excellency the Countess of Irwin, the Countess of Reading, Lady Wilson, Lady Lloyd, Lady Willingdon, Lady Sydenham and Lady Chelmsford are Hon. Patronesses. The institution is largely dependent upon public contributions and Government assistance. The annual expenditure of the whole organization now exceeds Rs. 2,50,000. *President*: Shrimant Saubhagyavati H.H. the Ranisaheb of Sangli; *Honorary Organiser and General Secretary*: Mr. Gopal Krishna Devadhar, M.A., C.I.E.; *Local Secretary and Treasurer*: Mrs. Yamunabai Bhat; *Lady Superintendent and Secretary for Development and Collections*: Mrs. Janakibai Bhat (Kaiser-i-Hind Silver Medal); *Joint Lady Superintendents*: Mrs. Saralabai Naik, M.A., and Miss Dwarkabai Bhat, B.A., B.T.; *Hon: Secretaries, Nursing and Medical Education Committee*: Rao Bahadur Dr. P. V. Shikhare, L.M. & S., Dr. V. C. Gokhale, L.M. & S. and Dr. N. L. Ranade, B.A., M.B.B.S.

PRESS-OWNERS' ASSOCIATION, Bombay—Started on 30th April 1919 to promote the interests of the printing and litho presses and allied trades, to bring about harmony and co-operation among press owners and proprietors and to take such steps as may be necessary in furtherance of the above objects.

Office:—Gaiwadi, Girgaum, Bombay 4.

President:—Shet Pandurang Javjee.

Secretary—Mr. Manilal C. Modi.

RANGOON LITERARY SOCIETY.—*President*, H. E. The Governor of Burma. *Hon. Secretary*, Mrs. C. Peacock, 17, York Road.

RECREATION CLUB INSTITUTE.—This Institution was started in 1912-13 by the members of the Ismaily Dharmic (religious) Library in Bombay. Its central office is in Bombay with branches at Ahmedabad, Ahmednagar, Karachi, Hyderabad (Sindh), Poona, Warangal, etc. The aims and objects of the society are to elevate and improve the social, economic and spiritual condition of the depressed and poor classes of people and with that intent to found primary schools, associations and such departments and to take all constructive means to achieve the above objects. The Institute has 2 orphanages with 150 inmates, industrial works, domestic industries, sales depots, Clubs, Libraries, etc. It also issues two Anglo-Vernacular papers, The *Ismaily* (a weekly) and The *Nizari* (a monthly). *Hon. Secretary*, Mr. Hasan Lalji Devraj.

ROYAL SOCIETY OF ARTS, INDIAN SECTION.—This Society was founded in London in 1754. Its recently published history by Sir Henry Trueman Wood, late Secretary of the Society, gives the following account of the Indian Section. In 1857, a proposition was made by Mr. Hyde Clarke, who wrote to the Council suggesting that "a special section be formed for India, another for Australia, one for English, America and so on." It was suggested that the Indian Section should meet once a fortnight for the reading of papers. Nothing came of the suggestion until ten years later when Mr. Hyde Clarke returned to England, and in 1868 he renewed his proposal, but only proposing the formation of a Committee which should organise conferences on Indian subjects. This time the suggestion was taken up more warmly. Mr. Hyde Clarke himself was placed on the Council, and the Indian Conferences, which soon developed into the Indian Section, were started. "The Indian Section thus established became a most important department of the Society. It has had great results in India by spreading information as to the directions which the development of Indian manufactures and Indian products could most usefully take, and in England by giving similar information as to the industrial resources and progress of India itself. The Section has received great help from the Indian press and it has in return been of service to the Indian press in supplying useful information to it. It has been of great value to the Society itself as the means by which many members have been added to its list, so that in fact, thanks to a very large extent to the work of the Indian Section and of the allied section for the Colonies, a large proportion of the present number of members come from the dependencies of the Empire abroad." *Secretary of the Society*: G. K. Menzies, M.A.; *Secretary of the Indian and Dominions and Colonies Sections*: W. Perry, B.A., I.C.S. (retired) 18, John Street, Adelphi, London, W. C. 2.

SERVANTS OF INDIA SOCIETY.—The Servants of India Society which was founded by the late Mr. Gopal Krishna Gokhale, C.I.E., in 1905, has its Head-quarters in Poona and its objects are "to train national missionaries for the service of India and to promote by all constitutional means the true interests of the Indian people." Its government is vested in the First member or President and a Council. On the death of Mr. Gokhale in February, 1915, the Right Hon'ble Mr. V. S. Srinivasa Sastri was elected President and continues to hold the office being duly re-elected thrice. Mr. G. K. Devadhar, M.A., C.I.E., was unanimously elected the President of the Society when the Right Hon. V. S. Srininivas Sastri resignee the Presidentship before proceeding to South Africa as Agent to the Governor-General of India in 1927. Besides the headquarters, it has present four branches, *viz.*, (1) in Bombay, (2i)n Madras, (3) in the United Provinces, (4) in the Central Provinces. Moreover, it has several additional centres of its activities under the branches such as, Calicut, Mangalore,

Lucknow, Lahore and Cuttack, Orissa. Each Branch consists of ordinary members, members under training and permanent assistants who work under the direction of Senior Member. Mr. N. M. Joshi, a nominated member of the Legislative Assembly, representing labour interests. The branches engage both in propagandist and active work of political, educational, social, rural credit co-operative and philanthropic character in which they secure the help of a large number of voluntary workers, both men and women. A fair idea of the work of a branch can be had from a brief description of the operations of the Bombay Branch whose members have so far undertaken activities in various fields. (1) Social purity like the Holika Sammelan of Bombay, (2) Social reform organization under the auspices of the Indian National Social Conference, (3) rousing public opinion about elementary education, (4) promotion of the cause of elevation and education of Indian women by building up institutions like the Poona Seva Sadan Society with its many branches with 1,500 (including duplications of about 150) women and girl pupils in nearly 121 classes of its many departments and 16 hostels at Poona and at brnaches. Mr. G. K. Devadhar, M.A., C.I.E., is its Hon. Organiser and General Secretary. (5) Social Service as carried out by the Social Service League of Bombay of which Mr. N. M. Joshi, B.A., is the Honorary General Secretary, (6) spread of co-operative movement among the agriculturists, compositors in the city of Poona and mill-hands in Bombay. The co-operative societies, as at Hadapsar and other villages around Poona, started for the benefit of these poor people, number over 35 with a total membership of over 1,800, capital of nearly three lakhs and a total turn-over of five lakhs per year. Nineteen of these societies which are in Bombay for poor labouring classes are so conducted as to free their members entirely from their chronic indebtedness. Mr. G. K. Devadhar is the Hon. Secretary of the Debt Redemption Committee, Bombay. The membership of the latter group consists of sweepers, scavengers, mill-hands numbering above 550 and debt amounting to nearly three lakhs of rupees have been cleared off. Moreover, educational work was organized by starting a Co-operative Quarterly and by starting a Co-operative Secretaries' Training Class in Bombay for 60 Secretaries from the various districts for three years. These are now transferred to the Central Co-operative Institute, Bombay, of which Mr. G. K. Devadhar is now the President. These three experiments on such a scale were the first of their kind in India, (7) relief work connected with wide-spread calamities by organizing the Plague Relief Committee of Poona, which succeeded in making inoculation popular in the Deccan, the Salumbra Fire Relief Committee which arranged for the Relief to sufferers for five years and life pensions and by undertaking a scheme of non-official relief during the famines of 1907-08 and 1914 in the United Provinces, the famine in Gujarat and Kathiawar of 1911-12 and the famine of 1913 in the district of Ahmednagar, and that of 1918-1919 in Gujerat and the Deccan; and in 1920 in Orissa near Puri, (8) Influenza relief was well organized by members of these associations in Bombay and Poona. Since the outbreak of the Malabar Rebellion in August 1921 the members of the Society organised the work of relief which was administered with the help of outside organizations like the Poona Seva Sadan, the Y. M. C. A., etc., and in collecting funds from all over the country especially Bombay. Thus from all over the country substantial help to the extent of nearly Rs. 3,50,000 was collected. For the first six months about 19 camps with nearly 27,000 men, women and children of all castes and creeds were maintained very efficiently and during the later six months thousands of Hindu and Moplah families were supported in their villages in the disturbed and the destroyed parts of the district of Malabar. This work was closed in the beginning of October 1922. Mr. G. K. Devadhar as Vice-President of the Malabar Central Relief Committee directed the work on behalf of the Servants of India Society. In 1924 the Society organised the South Indian Malabar Flood Relief Central Fund in Bombay with a view to giving relief to the poor people, especially the Panchamas, who had suffered from unprececented floods in the districts of Malabar, Trichinopoly, Coimbatore, Tanjore, and the Indian States of Mysore, Travancore and Cochin. Mr. G. K. Devadhar was the Hon. General Secretary and Treasurer and the late Mr. C. S. Deole, one of the Hon. Secretaries of the Fund. The distribution of relief was carried on with the help of Y. M. C. A. workers in the different districts, (9) organizing public opinion on the question of Indians in South Africa, (10) its political work is conducted strictly on constitutional lines and thus it was able to start District Congress Committees in several wards of the city of Bombay. These conducted a political quarterly, (11) it started in Bombay an organization called the Indian Economic Society with a view to promoting the study of Indian economics on right lines and also conducted a vernacular class. (12) A new association called the Indian Liberal Club had been started to carry on political propaganda. It is now reorganized as Institute of Economics and Political Science. After the death of Mr. Deole, Mr. Varti, M.A., is the Hon. Secretary. Besides, the society was engaged in conducting a scheme of welfare work to supply cheap grain, cheap cloth and cheap credit at Jamshedpur, Mr. K. J. Chitalia, one of its Members, has started a Gujarati ladies' organization called the Bhagini Samaj for work among women in Gujarat and Kathiawar. Mr. A. V. Thakkar has started in the District of Panch Mahals in Gujarat a mission for the Bhils for the improvement of the Bhil population and it is called the *Bhil Seva Mandal.* In 1927 the members of the Society took a very active part in collecting funds and organising very suitable measures of relief to those who suffered from the devastating floods in Gujarat (British), Baroda, Kathiawar, Sind and in

Orissa. The work of building houses for the depressed classes in the town of Baroda and of reconstructing several villages still continues. The Society also takes active interest in the organization of labour movement in India. Mr. N. M. Joshi, B.A., is a nominated member of the Legislative Assembly successively for nine years. Two of its Members, Messrs. N. M. Joshi and R. R. Bakhale, are conducting a labour monthly called the "All-India Trade Union Bulletin," which has been recognized as the Official organ of the All-India Trade Union Congress. Since its start the United Provinces Branch have organized bands of volunteers who rendered assistance, in a manner that called forth general approbation, to the pilgrims at the Kumbha Mela in Hardwar and Allahabad, the ladies of the Poona Seva Sadan assisting in this work in the earlier days. One of the principal activities of this branch is the widespread of Boy Scouts in Northern India. The Society engages in journalistic work also, having in its control the *Hitavada*, an English weekly in Nagpur, and the *Dnyan Prakash*, a Marathi daily and weekly in Poona. The Society has been conducting, with Mr. Vaze as editor, an English weekly called *The Servant of India*. The U. P. Branch had in addition undertaken the publication of pamphlets on public questions and has sent out three such publications together with a large quantity of leaflets This Branch has taken lead in organizing the *Boy Scout Movement* all over the province through the local Seva Samitis. The Madras Branch engages itself principally with co-operative organization, publishing in three languages Co-operative Bulletin and conducts Co-operative Industrial Societies and the Social Service League activities in the city of Madras. In 1924 it did the work of distributing relief to the refugees in the flooded areas of the Madras Presidency. On the West Coast the Society carries on through the Devadhar Malabar Reconstruction Trust and the Depressed Classes Mission a large amount of educational, economic and social reconstruction work for the benefit of the depressed classes, the weavers and others including the Moplahs; it maintains a hostel for more than 20 boys of the Panchama community and has five centres where these and other people are helped to settle in colonies on lands either granted by Government or private inviduals or purchased. The expenses incurred by the Central Home of the Society in Poona together with its four branches coupled with the various centres working under them exceed Rs. 85,000 a year and this amount is made up by contributions from Indians, rich as well as poor. The present number of workers, enlisted by the Society is about 30, most of whom are University men of considerable standing. Besides, there is a large number of devoted associates and other helpers—men as well as women—connected with the institutions started by the members of this Society.

President.—Mr. G. K. Devadhar, M.A., C.I.E., and Senior Member, Bombay Branch, The Right Hon'ble Mr. V. S. Srinivasa Sastri, B.A., L.T., Royapetta, Madras Senior Member' Madras Branch (on leave), Pandit Hirday Nath Kunzru, B.A., B.Sc., Vice-President of the Society and Senior Member, U. P. Branch, Mr. Natesh Appaji Dravid, M.A., Senior Member; Central Provinces Branch, Mr. A. V. Patwardhan, B.A., Senior Member Business Branch, Poona, Messrs. Joshi, Vaze and Krishna Prasad Kaul, B.A., together with the senior members of Branches constitute the Council of the Society with Mr. G. K. Devadhar as its President. Mr. Anant Vinayak Patwardhan, B.A., is the Secretary of the Society. Six young men, nearly all graduates who were admitted on probation, were last year enrolled as members under training. In 1923 and 1924, two members were admitted as members under training and one young man, an M.A., on probation. In 1927 one and in 1928 three more were admitted as probationers. The Society mainly depends upon the public for its support. In 1926 the Society's Press in Poona was burnt inflicting a very heavy loss which was nearly made good by the public by contributing to its Fire Relief Fund a sum of two lakhs of rupees. The foundation. stone of the new Press building was laid by Sir Jamshedji Jijeebhoy, Bart. K.C.S.I., The Wadia Charities gave the largest donation.

SEVA SADAN.—The Seva Sadan Society was started on the 11th of July 1908, by the late Mr. B. M. Malabari. It is the pioneer Indian ladies' society for training Indian sisters ministrant and serving (through them) the poor, the sick and the distressed. The Society has its headquarters in Gamdevi, Bombay. The Society maintains the following departments of work: (1) Home for the Homeless; (2) Ashrams (Training Homes); (3) Marathi Normal Classes; (4) Home Education Classes; (5) Industrial Department including a workroom, Sewing, Cutting, Hosiery, Cane-work, Cookery, Fancy Embroidery and Artificial Flowers are among the chief industries taught. Total number of women in the different classes is nearly 450.

Secretary, Miss B. A. Engineer, M.A., LL.B. M.B.E., J.P.

CONSUMPTIVES' HOME SOCIETY.—This Society was started by the late Mr. B. M. Malabari and Mr. Dayaram Gidulmal on the 1st of June 1909. It was registered under Act XXI of 1860. Mr. Malabari secured a large grant of land in a Himalayan pine forest in Dharampur (Simla Hills) from H. H the Maharaja of Patiala, for a Sanatorium for Consumptives. His Highness also gave a donation of Rs. one lakh. In 1911 by special permission the Sanatorium was named "The King Edward VII Sanatorium." The Sanatorium has its special water works known as the Lady Hardinge Water Works, presented by the late Sir Chinubhai Madhavlal, Bart., of Ahmedabad. The Sanatorium has a Guest House: The Noshirwan Adul Guest House for visitors to Dharampore. It has accommodation for 90 patients including the special Punjab Block built from a grant of the Punjab Government and reserved for European patients. Most of the blocks

and cottages are built by Parsis. The Sanatorium has its own dairy and is called the Bai Pirojbai R. H. Patuck Dairy. The Recreation Hall is called "The Sir Bhupinder Singh Recreation Hall" after the name of the Maharaja of Patiala. Mr. Malabari collected an Endowment Fund of about Rs. 67,000 lodged with the Treasurer, Charitable Endowments, under Act VI of 1890. Nearly Rs. 2, 60,000 have been spent on laying out the sites, buildings, etc., and the current annual expenditure is about Rs. 46.000. The Senior and Junior Medical Officers are in charge of the Sanatorium. The Office of this Society is situated at the Seva Sadan Buildings, Gamdevi, Bombay. Mr. S. P. Wadia is the Hon. Secretary and Mr. K. M. Jhaveri is the Hon. Treasurer.

SOCIETY FOR THE PROTECTION OF CHILDREN IN WESTERN INDIA.—Office and Homes at King's Circle, Matunga.

Founded—To prevent the public and private wrongs of children and the corruption of their morals; to take action for the enforcement of the laws for their protection, and, if necessary, to suggest new laws or amendments of the existing laws; to provide and maintain an organization for these objects; to promote education; and to do all other lawful things incidental or conducive to the attainment of the foregoing objects. Subscription for annual membership, Rs. 10; for Life Membership, Rs. 100. *President*:—Dr. Sir Temulji B. Nariman ,Kt.

Honorary Secretaries: Dr. Mrs. D. A. De-Monte, Mr. R. P. Masani, M.A., and Mr. J. G. Modi, M.A. *Hon. Treasurer*, Khan Bahadur H. S. Katrak.

THEOSOPHICAL EDUCATIONAL TRUST.—This Society was established in 1913 and stands for the education of Indian boys and girls, in which the physical, emotional, intellectual and religious welfare are equally attended to. The general educational policy of the Trust is embodied in "Principles of Education" by Dr. Besant. The chief schools and colleges maintained are (1) Theosophical School and College at Adyar (Residential and Co-educational); (2) Theosophical College and High School at Madanpalli (Co-Educational): (3)Theosophical School or Boys at Benares; (4) Theosophical College for Women at Benares. It is under contemplation to open a Unitary Residential University at Madanapalli and apply for a charter *President*, Dr. Annie Besant; *Secretary*, Mr. Iqbal Narain Gurtu, M.L.C., *Treasurer*, Mr. A. Schwarz, (*Headquarters* are at Adyar.)

WESTERN INDIA NATIONAL LIBERAL ASSOCIATION—(*Founded in* 1919).—The Association was formed, in pursuance of clause (*b*) of Resolution XI of the First Session of the All-India Conference of the Moderate Party, with a view—to do sustained work for the political progress and the moral and material welfare of the people; to give expression from time to time to the considered opinion of the Party on matters of public interest; and to inform and educate public opinion in this presidency in support of its views, policy and methods.

The Association accepts Article I of the Constitution of the Indian National Congress Organization as it stood in 1919 and will work for the fulfilment of the declaration made by His Majesty's Government on the 20th August 1917, in accordance with the principles embodied therein. For the promotion of its aims and objects the Association shall pursue the following principles, policy and methods:—(*a*) Law-abiding and constitutional methods of agitation or work; (*b*) Co-operation with Government, whenever possible and constitutional opposition to it, whenever necessary; and (*c*) Fostering a spirit of broadminded liberalism based on principles of liberty, equality and fraternity, among the different classes and communities of the people.

The affairs of the Association are conducted by a Council consisting of 46 members who are elected every three years.

President, The Hon'ble Sir D. E. Wacha, Kt., M.C.S.; *Vice-President*, Sir Chimanlal H. Setalvad, K.C.I.E., LL.D., *Hon. Secretaries*, Mr. Kazi Kabiruddin, Bar.-at-Law, Mr. J. R. B. Jeejeebhoy; Mr. J. R. Gharpure, B.A., LL.B., and Mr. N. M. Joshi, B.A., M.L.A. *Assistant Secretary*:—Mr. V. R. Bhende. *Office*:—Alice Building, Hornby Road, Fort, Bombay.

WOMEN'S INDIAN ASSOCIATION.—This Association was started in Advar, Madras, in 1917, with aims of service to women similar to those of the Seva Sadan in Bombay. In ten years it has been able to start 70 branches and it has now over 3,000 members. It establishes classes, meeting places, and regular lecture programmes for women in each of these branches. Each branch is autonomous and works according to the need of the locality. Classes are held to teach the vernaculars, English, needle-work—plain and fancy—first-aid, rattan-work and music. Weekly lectures are given on subjects of general interest relating to women, such as health, education, religion, civic responsibilities, woman suffrage, etc. Though started entirely as an educational institution, the movement for the Reform Bill proved that a most necessary part of work for the advancement of women was propaganda in support of woman suffrage. Accordingly the gaining of the vote for women was added to the objects of the Association and the Association specialises on woman suffrage and the removal of sex disqualification from all franchises and candidatureship for local boards, municipal and legislative councils. Valuable work along these lines has been done by the Association as this is the only woman suffrage organization in India. The Association publishes a monthly magazine, *Stri-Dharma* Edited by Shrimati Malati Patwardham, B. A., in English with Hindi, Tamil and Telugu articles. (Rs. 4 to non-members, Rs. 2 to members). It is an all-India Association. Its largest branch is in Bombay, its greatest number of branches in South India, but yearly additional branches are being started in other provinces, and there are flourishing branches as far north as Lahore and Lashkar. The prospects of rapid growth

for the Association are very bright as it has been found that women everywhere welcome the self-development which the establishment of these branches brings. The Association is affiliated with the International Woman Suffrage Alliance and the International Women's League for Peace and Freedom.

Objects:—

To present to women their responsibility as daughters of India;

To band women into groups for the purpose of self-development, education, and the definite service of others;

To secure the abolition of child-marriage and child-parenthood;

To help them to realise that the future of India lies largely in their hands, for as wives and mothers, they have the task of training and guiding and forming the character of the future rulers of India;

To secure for women the vote for Municipal and Legislative Councils as it is or may be granted to men

To secure for women the right to be elected as members on all Municipal and Legislative Councils.

Headquarters: Adyar, Madras. *President*—Dr. Annie Besant. *Vice-Presidents*—Dr. Multhulakshmi, M.L.C. Mrs. Jinarajadasa. *Hon. General Secretary*—Shrimati Malati Patwardhom, B. A. *Hon. Treasurer*—Shrimati Ammu Swaminadhan.

YOUNG MEN'S CHRISTIAN ASSOCIATION.—This Association, which was founded by the late Sir George Williams in 1844, is now a world-wide movement, well established in almost every country in both the hemispheres. The aim of the Association is, through its religious, social, educational, and physical work to answer the fourfold—spiritual, social, mental and physical—needs of young men.

The Young Men's Christian Association, though relatively new to India, is spreading rapidly. The 'local' Associations are autonomous and governed by local Boards of Directors. These Associations in Convention elect a National Council which is responsible for the supervision and expansion of all forms of the Association work in India, Burma and Ceylon.

There are now over 60 Associations affiliated to the national union and many other village Associations with many thousands of members of all races and creeds. The following Associations own one or more buildings which serve as the local headquarters:—Allahabad; Bangalore; Alleppey; Bombay; Calcutta; Calicut; Coimbatore; Colombo; Galle; Hyderabad; Jubbulpore; Kandy; Karachi; Kunnamkulam; Kottayam; Lahore; Madras; Nagpur; Naini Tal; Poona; Rangoon; Secunderabad; Simla; Ootacamund; Wellington; Delhi; Jaffna; Madura; Murree; Risalpur; Trivandrum. The others use rented or rent-free buildings.

The work of the National Council and of the local Association is carried on by numerous voluntary workers and Committees, assisted by 114 specially trained full-time Secretaries. A feature of the Y. M. C. A. in India is the international character of its Secretariat. It is made up of 19 Americans, 4 Canadians, 21 Engishmen, 2 Scotchmen, 1 Swiss, 2 Anglo-Indians and 65 Indians and Ceylonese.

The classes of people reached by the Indian Y. M. C. A. and the lines of service it attempts to do for them may be stated as follows:—

Generally:—1. Literature:—Publication of original works and reprints. Four series: "Heritage of India;" "Religious Quest of India;" "Religious Life of India"; "Makers of Modern India."

2. Lecture Bureau:—Many thousands of slides on a wide variety of educational and recreational topics serving a clientele in over 700 centres in India.

3. Physical—Training Physical Directors for schools and colleges, fostering playground movement, Olympics.

4. British Army Work in a number of centres and especially on the N. W. Frontier.

Boys:—Scouting, Boys' Clubs, Camps, etc.

Students:—Hostels and Institutes in most University Centres.

Indian students in Britain:—Specially in London, Edinburgh and Glasgow.

"*Citizens*":—(*i.e.*, English-educated Indians Ceylonese and Burmese): Reading Rooms, Libraries, Lectures, Group Conferences; Study-Circles; handling many subjects of vital interest—social, intellectual and religious.

Soldiers:—Institutes and Holiday Homes.

Anglo-Indians:—Hostels, Institutes, Employment Bureaux.

Europeans:—Hostels, Institutes, Employment Bureaux.

Labourers in Mills:—"Welfare" Work.

Indians in Fiji.—

Rural Communities.—"Rural Reconstruction" work embracing Co-operative Banking, Distribution, Cattle Insurance and Arbitration, Cottage Industries, and Adult Education in four Selected Centres.

A monthly magazine, the YOUNG MEN OF INDIA, is issued at Rs. 5 per annum, including postage.

The work of the National Council (excluding that of the 170 local Y.M.C.As.) calls for a Budget of Rs. 2,02,622 in 1928. Of this sum, Rs. 70,000 has to be raised from the public in India.

The Headquarters of the National Council is 5, Russell Street, Calcutta. The officers are:—

Patron:—His Excellency Baron Irwin of Kirby-Underdale, P.C., G.C.S.I., G.C.I.E., Viceroy and Governor-General of India.

President of the National Council:—The Most Rev. Dr. Westcott, Metropolitan of Indian.

General Secretaries:—K. T. Paul, O.B.E., and Dr. S. K. Datta.

The Bombay Association now possesses four well-equipped buildings:—Wodehouse Road, Lamington Road, Rebsch Street and Reynolds.

Road. The President is Mr. W. H. Neilson, G.B.E., M.I.C.E., and the General Secretary is Mr. H. W. Bryant, M.B.E. In connection with each building there is a well managed hotel, one for Anglo-Indian apprentices, one for Indian students, one primarily for European business men, and one for Indians. There is also 'Welfare' Work for labourers in Naigaon; Secretary, W. E. D. Ward. There is city-wide Physical Work programme.

Young Women's Christian Association of India, Burma and Ceylon.—This Association founded in the year 1875 was organized nationally in 1896. The aim of the Association is to promote the physical, intellectual, social and spiritual welfare of young women and girls in India, European, Anglo-Indian and Indian. This is done by the establishment of local branches in different centres. At present they number 95 including city and student branches. The Associations in big cities have a large membership including most classes of the community. The needs of girls are met by physical drill, recreation, clubs and classes, lectures, commercial classes, Bible Study and devotional meetings, and meetings for social intercourse. Boarding Homes, some of them holding as many as 70 girls, are established where there is a demand for them and the Association, at present, owns 24 including 8 holiday homes in the hills. These hostels accommodate working girls, teachers, nurses, students and apprentices. Rates vary according to the residents' salaries and accommodation though all equally receive the benefits of a comfortable home, good food and wholesome surroundings. The holiday homes provide cheap holidays in healthy surroundings and also accommodate girls who work in the hills during the hot season. In addition to holiday homes Summer Conferences are held annually at Ootacamund and in the North Indian Centre. Special Girls Camps are arranged from time to time in many centres.

Travellers' aid work is done in the large ports, especially Colombo, and a large number of transient guests and visitors are accommodated in the Homes in these centres. The Association also runs employment bureaux through the agency of which many girls find positions. The Commercial schools train girls for office and business life. These larger Associations are manned by a staff of trained secretaries, some of whom come from Great Britain, America, Australia, New Zealand and Canada. The others are found and trained in India. In many of the smaller branches where the work is of a simpler nature, it is carried on by voluntary workers who render faithful service year by year. The majority of the Indian branches are also carried on in this way. The Student Department is affiliated to the World's Student Christian Federation and has 42 branches in the various Schools and Colleges.

The Association, which is affiliated to the World's Committee of the Young Women's Christian Association, is international and inter-denominational. Full membership is confined to members of the Christian Church, but Associate membership is open to any girl or woman of good character, no matter what her religion may be. The National Headquarters are situated in Calcutta and business is conducted by the National Committee which has a representative membership in all parts of India, also in Burma and Ceylon.

The Patroness of the Association is H. E. Lady Irwin.

Copies of the annual reports and other printed matter can be obtained from the National Office which is at 160, Ashutosh Mukerji Road, (P. O. Elgin Road), Calcutta. The Official Organ of the Association is the "Woman's Outlook," an illustrated monthly magazine, which supplies women living in India with a good magazine at the price of Rs. 2-0-0, post free, per annum.

ASSOCIATION OF BRITISH UNIVERSITY WOMEN IN INDIA.

The Association of British University Women in India was established in 1913. Its objects are :—

(1) To facilitate intercommunication and co-operation between women belonging to the universities of the United Kingdom, resident in India.

(2) To provide a means of keeping in touch with the universities of the United Kingdom, by communication with the British Federation of University Women, and otherwise as may seem expedient.

(3) To act as an organisation which shall afford opportunity for the expression of united opinion and for concerted action by university women.

Membership is open only to those women who hold degrees in any university in the United Kingdom, or hold Oxford or Cambridge Honours Certificates; but Associate Membership is open to women who have studied at a British University for two years and each Branch may admit as Honorary Members women who have advanced the higher education and interests of women.

The Association of British University Women has four branches. The addresses of the Honorary Secretaries are as follows :—

Hon. General Secretary :—Mrs. E. F. Hingeley, c/o P. O. B. 535, Bombay.

Hony. Local Secretaries.

Bombay ..Mrs. Blair, Arthur House, Cooperage, Bombay.

Calcutta ..Hon. Secretary c/o Miss Cornelia Sorabji, 28, Chowinghee, Calcutta.

Delhi ..Mrs. Blomfield, Aurinzet Rd., Raisina, Delhi.

Punjab ..Mrs. Irving, 16, Davis Road, Lahore.

The Delhi and Punjab Branches came into existence in 1918. The Calcutta and Bombay Branches are influential and have repeatedly intervened with good effect to educate public opinion with regard to subjects affecting women. All Branches have, for instance, made investigations on behalf of the Education Department, Government of India, the Calcutta University Commission, etc., and have supplied, through the

International Federation of University Women, information on Secondary Education in India to the League of Nations. They have been the means of introducing women on to University Senates and Municipalities. The Calcutta Branch carried through an important exhibition of Food Products.

The Bombay Branch has done good work in connection with the formation of the Social Purity Committee and has, through a special sub-committee, organized public meeting for women on subjects affecting their interests about which legislation was being or had been recently enacted.

A valuable part of the work of the Association was the establishment of **Women's Employment Bureau** in Calcutta and Bombay. They were remarkably successful. The Bombay Bureau was eventually merged into the employment Bureau established by the Women's Council; the Calcutta Bureau has ceased to exist.

As a means of promoting friendships between women from various parts of the United Kingdom, with widely differing tastes and interests and spheres of life in India, and as an instrument for affording opportunities for usefulness to educated women, the Association of University Women has a useful function to perform.

Federation of University Women in India.

This is an organization conceived to unite for service and fellowship all University Women of whatever race or University who may be resident in India. Units representing British Universities, Indian Universities and American Universities severally have existed since 1913 (Britain) and 1920 (India and America) respectively.

These Units are now fused together into one body: and are as such affiliated to the International Federation of University Women which embraces 27 countries of the world and has its headquarters at Crosby Hall, Cheque Walk, London.

This International Federation is then a kind of League of Nations in which the University is the Unit: and the opportunities it affords for better understanding for world-friendship, and world-service, will easily be imagined.

As forming one Family, its Members help the common cause of women: they help one another by inspiration and interchange of service: they help the country for which as individual Units they stand, inasmuch as that country is swept forthwith by reason of its place within the International Federation alone, into world statistics and the dignity of recognition by the League of Nations at Geneva.

The benefit to Members individually also is great. The Club Houses of the Federation all over the world are open to them. Equally so are all Scholarships and Fellowships offered by the Federation.

During 1928 these last have included. Scholarships from Great Britain and America which gave free tuition, board and residence at certain Colleges to students for a degree: residential scholarships at Crosby Hall, valuable Fellowships and Prizes offered chiefly for Medical or Scientific research by Australia and America.

Membership is open to Women Graduates of any University through the Unit representing that University. Colonial Graduates are at present attached to the British Unit.

Subscriptions.—British Unit ..Rs. 3 a year.
Indian Unit ..Rs. 2 a year.
American Unit .Rs. 2 a year.

The Federation has Branches in Bombay, Calcutta, Lahore, Madras: Kodaikanal. Each Branch has its local Committee. But as a whole the Federation is under a Central Committee with Headquarters at Calcutta for the years 1928 and 1929.

OFFICE BEARERS, CENTRAL COMMITTEE.

President—Mrs. Stewart Macpherson.

LOCAL REPRESENTATIVES.

Bombay ..Miss Rustomjee
Mrs. Doctor.
Calcutta ..Mrs. Kellas.
Miss S. Ray.
Lahore ..Mrs. Dodd.
Mrs. Das.
Madras ..Mrs. Janakiamna.

Honorary General Secretary Miss Cornelia Sorabji, Bar Library, High Court, Calcutta.

Applications for membership should be made to the Honorary General Secretary who will forward the same to the Local Secretary to whose Unit it may appertain.

EX-SERVICES ASSOCIATION, INDIA AND BURMA.

The following shows some of the work carried out during 1926 by the Association, which undertakes in India and Burma the work on behalf of British Ex-Officers and British Ex-Service men to which the late Earl Haig pledged himself in England :—

(*a*) 260 applicants provided with employment despite most unfavourable conditions.

(*b*) Over Rs. 2,36,400 expended in affording assistance to British Ex-Service men and the dependents of these in India and Burma, and a further £350 contributed to Earl Haig's Association at Home for the assistance of those Ex-Members of the Indian Services who after returning to England were in distress and want.

Men were started in business, distress arising from sickness and from unemployment was relieved, School fees were paid and School outfit provided for numerous children, repatriation and emigration expenses were met, board and lodging were provided while men looked for work, windows, orphans and deserted, wives assisted, expenses of training were borne, legal and medical expenses were met.

(*c*) Miscellaneous assistance of every description was given to applicants. Matters of pay, pensions and gratuities were assisted. information and advice as to Colonial Settlement were given, legal advice was afforded, letters of recommendation to possible employers were given, civil employment offered in India to serving soldiers was investigated, and the wants of large numbers of ex-officers and ex-service men were gone into at interviews.

H. E. the Commander-in-Chief is the President of the Association.

PRINCIPAL CLUBS IN INDIA.

Name of Club.	Established	Club-house.	Subscription.			Secretary.
			Ent.	Annual	Monthly.	
			Rs.	Rs.	Rs.	
Abbottabad ..	..	Abbottabad, N. W. F. Provinces.	24	..	14½	Col. S. G.L. Steele, C.B.
Adyar	1890	Madras	75	12	6	E. Barrington Smyth.
Agra	1863	Agra Cantonment ..	75	..	12	Capt. A. Catling.
Ahmednagar ..	1889	......	50	..	11	Capt. F. M. S. Gibson, M.B.E.
Aijal	1893	Lushai Hills, E. B. & Assam.	32	..	20	Capt. A. L. Fell.
Ajmere	1883	Kaiser Bagh	100	..	18	Lt. P. W. Grant.
Akola	1870	Berar	100	..	13	Lt. G. H. Lee, M.C.
Allahabad	1868	Allahabad	100	10	12	Capt. E. N. Ryder, M.B.E., D.C.M.
Amraoti	..	......	100	8	13	W. A. Forbes.
Amritsar	1894	Amritsar	30	..	20	R. F. Gwyther.
Bangalore, United Service.	1868	38, Residency Road ..	100	12	14	C. H. Bull.
Bareilly	1883	Municipal Gardens ..	50	..	9	Stanley Jones.
Barisal	1864	Backergunj, Barisal ..	32	..	13	Wm. Stewart.
Barrackpore ..	1850	Grand Trunk Road, S. Riverside.	100	..	15	J. Parkyn.
Bassein Gymkhana..	1881	Fytche Street, Bassein, Burma.	50	..	11	J. H. M. Kelly.
Belgaum	1884	Close to Race Course..	50	..	13	Major G. A. R. Spain.
Benares	..	......	20	..	16	Capt. W. T. Clyde.
Bengal	1827	33, Chowringhee Road, Calcutta.	500	25	18	Lt.-Col. H. De L. Ferguson, D. S. O.
Bengal United Service.	1845	29, Chowringhee Road.	150	20	14	C. W. Tandy Green.
Bombay	1862	Esplanade Road ..	300	12	10	W. F. Murdoch.
Bombay Gymkhana..	..	......	75	12	9	J. B. Barclay and W. J. Moore.
Byculla	1833	Bellasis Road, Bombay	350	24	12	R. Lowndes.
Calcutta	1907	241, Lower Circular Road.	200	120	10	Dr. S. Goswami and Dr. A. Jardine.
Cawnpore	1844	Cawnpore	50	..	10	E. J. W. Plummer.
Chittagong	1878	Pioneer Hill, Chittagong.	75	12	10	Lt.-Comdr. J. C. Cumming.
Club of Central India.	1885	Mhow	60	..	15	Capt. F. B. Hailstone, R. A.
Club of Western India.	1865	Elphinstone Road, Poona.	200	12	10	Capt. H. A. Bleach.
Cochin	1876	......	100	18	10	A. Meadows.
Coconada	1856	Coconada	70	..	10	F. N. Ryalls.
Coimbatore.. ..	1868	Coimbatore	75	9	10	W. H. Millar.
Coonoor	1894	Coonoor, Nilgiris ..	100	12	8	A. Percival Dall
Dacca	1864	Dacca	50	..	20	C. L.Wrenn.
Dalhousie	..	Dalhousie, Punjab ..	..	15	7	W. L. Stevenson.
Darjeeling	1868	Auckland Road ..	100	16	7½	A. A. Price.
Delhi	1898	Ludlow Castle, Delhi..	100	15	15	Colin M. Mackintosh.

Name of Club.	Established.	Club-house.	Subscription.			Secretary.
			Ent.	Annual	Monthly.	
			Rs.	Rs.	Rs.	
JHANSI	1887	Next to Public Gardens, Jhansi.	75	..	12	Capt. J. M. S. Gardner.
MADRAS	1831	Mount Road, Madras..	250	20	10	J. A. Thompson.
MADRAS COSMOPOLITAN.	1873	Mount Road	150	24	5	C. V. K. Chetty.
MALABAR	1864	Beach Road, Calicut..	100	6	12	L. B. Gillies.
MAYMYO	1901	......	100	12	20	E. A. C. Walker, I.S.O.
MOOLTAN	1892	Mooltan	50	..	15	Capt. H. F. Jeffreys, I.A.
NAINITAL	1864	......	150	12	10	Lt.-Col. J. de Grey, O.B.E., F.R.G.S.
OOTACAMUND ..	1840	Ootacamund, Nilgiri Hills.	150	18	10	Capt. T. de C. Croft.
ORIENT	..	Chowpaty, Bombay..	300	72	6	Sultan M. Chinoy and F. E. Sharp.
PEGU	1871	Prome Road, Rangoon	300	20	12	J. Mackinnon Goulding.
PESHAWAR	1883	Peshawar	50	..	12	Major E. E. Hills.
PUNJAB	1879	Upper Mall, Lahore ..	150	15	12	R. G. Saulez.
QUETTA	1879	Quetta..	120	..	18	Col. A. L. Barrett, D.S.O.
RANGOON GYMKHANA..	1874	Halpin Rd., Rangoon.	75	6	10	Capt. C. L. Foreman.
RANGOON BOAT CLUB..	..	Royal Lakes, Rangoon	48	2	5	C. M. W. de Facieu.
RAJPUTANA	1880	Mount Abu	50	..	8	R. E. Coupland.
ROYAL BOMBAY YACHT CLUB.	1880	Apollo Bunder ..	450	18	12	Capt. F. E. Henderson.
ROYAL CALCUTTA TURF CLUB.	1861	11, Russell Street ..	500	25	..	Capt. A. Howard, M.C.
ROYAL WESTERN INDIA GOLF CLUB.	..	Nasik	75	15	12	M. J. Giles.
SATURDAY .. .	..	7, Wood Street, Calcutta.	100	12	10	W. A. Bell and N. Standish.
SECUNDERABAD ..	1883	Secunderabad (Deccan)	100	..	12	Lt.-Col. W. C. Clark, D.S.O.
SHILLONG	1878	Northbrook Road, Shillong.	100	..	20	F. M. Clifford.
SIALKOT	..	Sialkot, Punjab ..	32	..	19	Lieut. W. H. Williams A.E.C.
SIND	1871	Karachi	300	12	12	Major E. R. M. Kirkpatrick.
TRICHINOPOLY ..	1869	Cantonment	90	12	12	C. O. Gaby.
TUTICORIN	1885	Tuticorin	50	6	13	G. A. C. Acres.
UNITED SERVICE CLUB.	1866	Simla	200	12	..	Major L.B. Grant, T.D.
UNITED SERVICE CLUB, LUCKNOW.	1861	Chutter Manzil Palace.	100	..	12	D. H. Keelan.
UPPER BURMA ..	1889	Fort Dufferin, Mandalay.	50	12	10	Capt. D. Mackintosh, D.C.M.
WESTERN INDIA TURF.	..	Bombay and Poona ..	50	15	..	Major J. E. Hughes.
WILLINGDON SPORTS	1917	Clerk Road, Bombay..	500	120	..	W. Botterill.
WHELER	1863	The Mall, Meerut ..	75	..	10	Major A. B. Bryson.

The Church.

In the ordinary acceptance of the term there is no established Church in India. An Ecclesiastical Establishment is maintained for providing religious ministrations, primarily, to British troops, secondarily to the European civil officials of Government and their families. Seven out of the fourteen **Anglican Bishops** in India are officers of the Establishment, though their episcopal jurisdiction far transcends the limits of the Ecclesiastical Establishment. The stipends of the three Presidency Bishops are paid entirely by Government and they hold an official status which is clearly defined. The Bishops of Lahore, Lucknow, Nagpur and Rangoon draw from Government the stipends of Senior Chaplains only but their episcopal rank and territorial titles are officially recognised. The Bishops of Colombo, Chota Nagpur, Tinnevelly-Madura, Travancore-Cochin, Dornakal, Assam and Nasik are not on the establishment. The last of the bishoprics to be founded was that of Nasik. In its relations with Government it is subordinate to the see of Bombay, from which it was formed in 1928. But the maintenance of the Bishopric is met entirely from voluntary funds.

The **ecclesiastical establishment** includes four denominations—Anglican, Scottish, Roman and Wesleyan. Of these, the first two enjoy a distinctive position, in that the Chaplains of those denominations (and in the case of the first-named the Bishops) are individually appointed by the Secretary of State and rank as gazetted officers of Government. Throughout the Indian Empire there are 134 Anglican and 18 Church of Scotland chaplains whose appointments have been confirmed. The Roman Catholics and Wesleyans receive block-grants from Government for the provision of clergy to minister to troops and others belonging to their respective denominations. The Wesleyan Methodist Church has a staff of military chaplains in India who receive a fixed salary from Government and 25 chaplains working on a capitation basis of payment by Government. Churches of all four denominations may be built, furnished and repaired, wholly or partly at Government expense.

The Anglican Communion has at last attained to **self-government**. In Dec. 1927 the Royal assent was given to an Indian Church Measure and Bill and Jan. 1, 1928, was fixed as the date of their coming into operation. These laws have effected two great changes in the affairs of the Church. Up to the present the General Council has been a body unrecognised by law. It is now empowered to legislate for the Church. Further, property which has been held for the Church by the Bishops and Archdeacons as Corporation Sole will now be transferred to Trust Associations which will be established under the Act. The actual date of severance of the legal bond between the Church in India and the Church of England has not yet been fixed, but by order of the King in Council it must be some day in 1930. After the severance is complete the Church in India will be as free to manage its own affairs as is the Church of any one of the other great Dominions. Apprehension was felt by many that freedom would involve drastic departures from the faith and practice of the Church of England. Such fears have already been proved groundless, in the first place by the adoption of a Constitution wholly Anglican in ideal and principle and secondly by the pledge given in the most solemn manner, at the instance of purely Indian dioceses, that the right of European congregations to worship according to the Use of the Church of England will be most carefully safeguarded.

After the date of severance the law of the Church will be its own "Canon Law" passed by the General Council. In every fully constituted Diocese there is a Diocesan Council composed of the Bishop, all the clergy who hold his license, and lay representatives from every parish. The Diocesan Councils manage all purely domestic matters and have the right of petitioning the General Council about any subject of wider importance which may interest them. They elect a given number of priests and laymen to be their representatives on the General Council. General Councils are held not less than every three years and usually at Calcutta. They consist of three "Houses," Bishops, Priests and Laymen. Every Diocesan Bishop has a place in the House of Bishops. The other two Houses are formed by the elected representatives of the Diocesan Councils. The three Houses usually sit and vote together, but any House has the right to meet alone if it desires to do so in order to formulate its policy or classify its opinions. A "Canon" of the Church is a Resolution passed with additional precautions ensuring due consideration by all three Houses. In all questions touching faith or Order the position of the episcopate as the divinely authorised teacher of the Church is most carefully safeguarded and the Bishops alone, without the concurrence of the other Houses, can issue Determinations about both subjects. But no Determination of the Bishops can be the subject of disciplinary action until it has become a Canon.

Another great change which will almost immediately take place will be the **election of the Bishops** to vacant sees by the dioceses over which they are to rule. State appointment after the date of severance will cease. Except for the Bishops, the Establishment of Chaplains will continue unchanged. In the course of the debate upon the Indian Church Bill in the House of Lords the Secretary of State for India stated that the Government of India acknowledged that the provision of Chaplains and the maintenance of churches for the use of its European servants were duties of moral obligation. Very few Europeans therefore will notice any change at all in the services of their Church. But the Indian section of the Church has at least been set free to develop along lines more suitable to the Indian character than those fixed for English people during the controversies and persecutions of the fifteenth century.

So far as the European and Anglo-Indian communities are concerned the activities of the Church are not confined to public worship and pastoral functions. The **education** of the children of those communities is very largely in the hands of the Christian denominations. There are a few institutions such as the

La Martiniere Schools, on a non-denominational basis; but they are exceptional. In all the large centres there exist schools of various grades as well as orphanages, for the education of Europeans and Anglo-Indians under the control of various Christian bodies. The Roman Catholic Church is honourably distinguished by much activity and financial generosity in this respect. Her schools are to be found throughout the length and breadth of the Indian Empire; and they maintain a high standard of efficiency. The Anglican Church comes next, and the American Methodists have established some excellent schools in the larger hill-stations. The Presbyterians are also well represented in this field, particularly by the admirable institution for destitute children at Kalimpong, near Darjeeling. Schools of all denominations receive liberal grants-in-aid from Government, and are regularly inspected by the Education Departments of the various provinces. Thanks to the free operation of the denominational principle and its frank recognition by Government, there is no "religious difficulty" in the schools of the European and Anglo-Indian communities.

Christian Missions.

The tradition that St. Thomas, the Apostle, was the first Christian missionary in India is by no means improbable. History, however, carries us no further back than the sixth century, when a community of Christians is known to have existed in Malabar. Since then the so-called **Syrian Church** in south-west India has had a continuous life. Except in its infancy this Church (or rather these Churches for the Syrian Christians are now divided into four communions) has displayed little of the missionary spirit until quite recent times. Western Christianity was first introduced into India by the Portuguese, who established their hierarchy throughout their sphere of influence, Goa being the metropolitical see of the Indies. St. Francis Xavier, a Spaniard by race, took full advantage of the Portuguese power in Western India to carry on his Christian propaganda. His almost super-human zeal was rewarded with much success, but many of the fruits of his labour were lost with the shrinkage of the Portuguese Empire. It is really to the work of the missionaries of the **Propaganda** in the 17th century that the Papacy owes its large and powerful following in India to-day. The Roman Catholics in India number 1,823,000, of whom 332,000 were added during the decade 1911-1921. The total of "Syrian" Christians (exclusive of those who while using the Syrian liturgy, are of the Roman obedience) is 315,000, as against 367,000 in 1901. Protestant Christians (the term throughout this article includes Anglicans) number 2,930,000, an increase of 547,000 since 1911. Thus, the total number of Christians of all denominations in India is now close on five millions. In fact it probably exceeds that figure at the present moment, as these statistics are taken from the Census Report of 1911, and the rate of increase during the previous decade was nearly 100,000 per annum.

The Protestant Churches made no serious attempt to evangelise India till 1813. They have thus been at work in the Indian mission field for over 110 years, and the statistical results of their efforts are given above. It is now, however, generally recognized that Christian missions are producing indirect effects in India which lend themselves only incompletely to any sort of tabulation. The main agency of this more diffusive influence of Christianity is the missionary school and college. The **Protestant missions** fill a considerable part in the elementary education of the country. According to the 1923 *Report of the National Christian Council for India* they are teaching 420,255 children in 12,699 elementary schools, mostly situated in villages. The majority (243,895) of children in these schools are non-Christians. The same is true also of the secondary schools and in a still greater degree of the colleges. The former number 523 with 70,254 male and 25,303 female pupils. There are 40 colleges affiliated to Universities, containing 20,062 male and 1,209 female students. Of these as many as 14,148 are non-Christians. From the standpoint of missionary policy much importance is attached to these agencies for the indirect propagation of the Christian faith. The statesman and the publicist are chiefly interested in the excellent moral effect produced by these institutions amongst the educated classes, and the higher educational ideals maintained by their staffs. The principal **University colleges** under Protestant auspices are the Madras Christian College; the Duff College, Calcutta; the Wilson College, Bombay; the Forman College, Lahore, and three women's colleges—the Women's Christian College at Madras, the Isabella Thoburn College at Lucknow, and the Women's Christian Medical College at Ludhiana. The Roman Catholics have a large number of educational institutions, ranging from small village schools to great colleges preparing students for University degrees. But the proportion of Christian students in their institutions is very much larger than in those of the Protestant bodies. The proportion of literates amongst native Roman Catholics is probably lower than amongst the Protestant converts; but compared with Hindus and Mahomedans it is conspicuously higher. The Roman Catholics have some 3,000 elementary schools in which 98,000 boys and 41,000 girls are receiving instruction. In middle and high schools they have 143,000 boys and 73,000 girls and in University colleges about 5,000 students of both sexes. These figures, however, include a large proportion of Europeans and Eurasians, who are an almost negligible quantity in Protestant mission schools and colleges.

More recent, but producing even more widespread results, is the **philanthropic work** of Christian missions. Before the great famine of 1878, missionaries confined themselves almost exclusively to evangelistic and educational activity. The famine threw crowds of destitute people and orphan children upon their hands. Orphanages and industrial schools became an urgent necessity. But the philanthropic spirit is never satisfied with one kind of organisation or method. A great stimulus was also given to medical missions. **Hospitals and dispensaries** have sprung up in all parts of the mission field; and leper asylums

are almost a monopoly of Christian missionary effort. In 1911 the total number of medical missionaries working under Protestant societies in India was 118 men and 217 women, the majority of the former being also ordained ministers of religion. There are 184 industrial institutions in which 59 different arts and crafts are taught, ranging from agriculture to type-writing. In this department the **Salvation Army** hold a prominent place; and the confidence of Government in their methods has been shown by their being officially entrusted with the difficult work of winning over certain criminal tribes to a life of industry. The indirect effect of all this philanthropic activity under missionary auspices has been most marked. It has awakened the social conscience of the non-Christian public, and such movements as "The Servants of India" and the mission to the Depressed Classes are merely the outward and visible sign of a great stirring of the philanthropic spirit far beyond the sphere of Christian missionary operations.

Reunion.—For very many years Indian Christians have shown that they felt much more acutely than Europeans the scandal and disadvantage of the divisions of Christendom. These divisions are due to a very much greater extent than is always recognized to political causes, and in the political conflicts of the sixteenth and seventeenth centuries, when they became crystallised, India had no part. Even those differences amongst Christians which have a purely religious origin and foundation seem to be of very little account to Indian converts. For them the great dividing line is that between Christ and Mahommed or Shiva and Vishnu. Standing before a background of paganism they are conscious of a real fundamental unity in Christ. Compared with the greatness of the gulf which separates Christian from non-Christian, the differences of "confession" and "order" which separate Christian from Christian seem to be wholly artificial and negligible. In consequence the reunion movement, which is noticeable all over the world, is nowhere so strong as in India. In South India it has already resulted in the formation of the South India United Church, which is a group union of five of the principal Protestant communions, and as these bodies are in communion individually with all, or almost all, the other Protestant bodies at work in India the Union may be regarded as a Pan-Protestant Union. The S.I.U.C. is at present negotiating with the Anglican Church. If as seems probable the negotiations are successful the result will amount to a union of all the Christian bodies in South India, except the Roman Catholics, on the basis of the last Lambeth encyclical. This will mean that a real National Indian Church will come into being. Although it will be tolerant of almost every expression of Evangelical opinion and will retain the freedom of development characteristic of Protestantism, by its acceptance of the Catholic creeds and the Historic Episcopate, it will be linked up with the Catholic tradition of the Anglican Church.

Anglican Missionary Societies.

The Church Missionary Society carries on work in India in seven different missions—the United Provinces, South India, Travancore and Cochin Bengal, Western India, Punjab and Sind and the Central Provinces and Rajputana. The names are in order of seniority. Work was begun in what are now called the United Provinces in 1813, in Bombay in 1820, in the Punjab in 1851, and in the Central Provinces in 1854. The Society has always kept Evangelistic work well to the fore; but it also has important medical missions, especially on the N.-W. Frontier, and many schools of the Primary, Middle and High standards. The Church of England Zenana Missionary Society is an offshoot of the C. M. S. controlling the work of 162 missionary ladies. The number of ordained European missionaries of the C. M. S. in India and Ceylon is 160, European laymen 30 and European laywomen 258. The Society claims a Christian community of 2,21,359 of whom 63,655 are adult communicants.

Society for the propagation of the Gospel.-Statistics of the work of this Society are not easily ascertained, as much of it is done through Diocesan institutions, which, while financed and in many cases manned by the S. P. G., are entirely controlled by the Diocesan authorities. The best known of the S. P. G. missions is that at Delhi, commonly called the Cambridge Mission to Delhi, carrying on educational work at St. Stephen's College and School. At the College there are about 200 students under instruction, and at the High School 800. The College hostels accommodate 100 students. Missions to the depressed classes exist in Burma, in the Ahmednagar District and in several parts of South India, especially in the Diocese of Tinnevelly-Madura. The S. P. G. also maintains an important Criminal Tribes Settlement at Hubli, in the Bombay Carnatic. There are 116,000 Indian Christians under the aegis of the S. P. G.; 90 ordained European missionaries and 98 European lady workers.

Other Anglican Societies.—The Oxford Mission to Calcutta was started in 1880. It works in the poorest parts of Calcutta and also at Barisal. There are 11 mission priests of this Society, and 16 Sisters. In addition to its work amongst the poor, the Oxford Mission addresses itself to the educated classes in Bengal and issues a periodical called *Epiphany*, which is known all over India.

The Society of St. John the Evangelist (commonly known as the Cowley Fathers) has houses at Bombay and Poona, and small stations in the Bombay Konkan. In Bombay its missionary work centres round the Church of Holy Cross, Umarkhadi, where there is a school and a dispensary. The Christians are chiefly drawn from the very poorest classes of the Bombay population. At Poona the Society co-operates with the Wantage Sisters and in Bombay with the All-Saints' Sisters. Other Anglican sisterhoods represented in India are the Clewer Sisters at Calcutta and the Sisters of the Church (Kilburn) at Madras. The St. Hilda's Deaconesses' Association of Lahore carries on important educational work (chiefly amongst the domiciled community) in the Punjab. The mission of the Scottish Episcopal Church at Nagpur, the Dublin University Mission at Hazaribagh, and the Mission of the Church of England in Canada

working at Kangra and Palampur (Punjab) should also be mentioned under the head of Anglican Missions.

An interesting development has lately taken place in the Anglican communion. In 1922 the foundations were laid of a new Religious community called the Christa Seva Sangh or the Society of the Servants of Christ. The aim of its members is to enable Indians and Europeans to live together a common life based upon the three-fold vows of poverty, chastity and obedience and by living together to develop the Religious life along lines peculiarly suited to India. Indians appreciate fully the value of "renunciation". The Sangh hopes to commend Christianity to India by presenting it with a concrete illustration of Christian asceticism. The first Ashram of the Brotherhood was consecrated by Dr. Palmer, Bishop of Bombay, in 1928. It is situated in Poona and it contained at the time of consecration 13 Brothers, of whom 6 were Indians and 7Europeans. It shows every sign of life and growth.

Bengal Ecclesiastical Department.

Westcott, The Right Reverend Foss, D.D. .. .. Lord Bishop of Calcutta and Metropolitan of India.

SENIOR CHAPLAINS.

Ridsdale, Rev. Arthur Cyril .. .. (On leave.)
Grimes, Ven'ble Cecil John .. .. Archdeacon of Calcutta.
D'yer, Rev. Basil Saunders, B.A. .. .. .. Chaplain, Barrackpore.
Birch, Rev. Ormonde Winstanley, M.C. .. .. Chaplain, Shillong.
Thomson, Rev. Thomas Albert .. .. .. Chaplain, Bankipore.
Williams, Rev. Henry Frank Fulford, M.A. .. Chaplain, Dinapore.
Wilkinson, Rev. Earnest Roland, M.A. .. .. Chaplain, Darjeeling.
Lee, Rev. Philip Erskine, M.A. .. .. .. (On leave.)

And 7 Junior Chaplains.

CHAPLAINS OF THE CHURCH OF SCOTLAND.

Mitchell, Rev. James Donald, M.A.B.D. .. .. Presidency Senior Chaplain, Church of Scotland, Bengal, and Senior Chaplain, St. Andrew's Church.
McCaul, Rev. Mathew Wilson, B.A. .. .. Second Chaplain, St. Andrew's Church, Calcutta.

CHAPLAINS OF THE CHURCH OF ROME.

Perior, The Most. Rev. Dr. Ferdinand, S.J. .. Archbishop, Calcutta.
Bryan, Rev. Leo., S.J. .. .. Chaplain, Alipore Central Jail.

Bombay Ecclesiastical Department.

Palmer, Right Reverend Edwin James, M.A. .. Lord Bishop of Bombay.
Martindale, Ven'ble Henry, M.A. .. .. .. Archdeacon.
Walker, G. L. .. .. Registrar of the Diocese.

SENIOR CHAPLAINS.

Hill, Rev. Edward Eustace .. .. (On leave.)
Collier, Rev. Charles Bernard Gray, M.A. .. .. Chaplain, St. Mary's, Poona.
Hewitt, Rev. George .. .. Ahmednagar.
Ryall, Rev. Charles Richard, M.A., B.D., B.A. .. Ghorpuri.
Mason, Rev. Charles Douglas Thomas, M.A., A.K.C. .. Chaplain, Deolali.
Harvey, Rev. George Frederick, M.A. .. .. Senior Presidency Chaplain.
Dart, Rev. John Lovering Campbell, M.A. .. .. Domestic Chaplain to the Bishop of Bombay and Chaplain of Mahableshwar.
Wormald, Rev. Robert Leonard, M.A. .. Belgaum.
Gaul, Rev. A. C., M.A. .. .. (On leave.)
Ashley-Brown, Rev. W. .. .. Kirkee.
Church, Bombay. (On leave.)

And 6 Junior Chaplains.

CHAPLAINS OF THE CHURCH OF SCOTLAND.

Macpherson, Rev. G. C., O.B.E., M.A., B.D... Presidency Senior Chaplain, St. Andrew's Church, Bombay.
Lee, Rev. R. E., M.A., B.D., M.C. .. .. .. Do. (offg.)
Rennie, Rev. J. Y., M.A., B.D., D. Litt. .. .. (On leave.)
McLean, Rev. L., M.A., B.D. .. .. .. Chaplain, Poona and Kirkee
Mclellan, Rev. D. T. H. .. .. (On Deputation.)
Rustiedge, Rev. J. W., M.A. .. .. Chaplain, Karachi.

CHAPLAINS OF THE CHURCH OF ROME.

Bertram, Right Rev. L. .. .. Presidency.

Madras Ecclesiastical Department.

Waller, Right Reverend Edward Harry Mansfield, D.D. (On leave.)

Smith, Ven'ble George Cecil Augustus, M.A. .. Archdeacon, Senior Joint Chaplain, St. George's Cathedral and Commissary in charge of the Diocese.

Rowlandson, Frederic, B.A., LL.B. .. .. .. Registrar to the Diocese and Secretary to the Lord Bishop.

SENIOR CHAPLAINS.

Wright, Rev. George Augustus Arthur, M.A. .. (On leave.)
Sell, Rev. Charles Edward, B.A. .. .. .. St. Thomas' Mount.
Borlase, Rev. John Jennings Dingle, B.A., LL.D., M.B.M. Chaplain of St. Mark's Church, Bangalore, and of Mercara and Mysore. (On leave.)
Hacking, Rev. Henry, M.A. .. .. Tiramalghery.
Beeley, Rev. Ben Darcey .. .. (On leave.)
Bull, Rev. Francis Faulkner .. .. .. Ootacamund.
Jones, Rev. Hugh, M.A. .. .. (On leave.)
Smith, Rev. Richard Marmaduke Langdale, B.A. . Coonoor.

And 11 Junior Chaplains.

CHURCH OF SCOTLAND.

Dodd, Rev. G. E., M.A., B.D. .. .. .. Presidency Senior Chaplain, St. Andrew's Church.
Mackenzie, Rev. Donald Francis, M.A. .. .. Bangalore.
Short, Rev. G., M.D. .. .. Secunderabad.

Assam Ecclesiastical Department.

Birch, Rev. Canon O. W., M.C. .. .. .. Shillong.
(Vacant) .. .. Darrang.
(Vacant) .. .. Lakhimpur.
Wood, Rev. W. H. S. .. .. Silchar.
Sefton, Rev. T. .. .. Sibsagar.

Bihar and Orissa Ecclesiastical Department.

Thomson, Rev. T. A. .. .. Senior Chaplain, Bankipur.
Williams, Rev. H. F. F., M.A. .. .. .. Senior Chaplain, Dinapore.

ADDITIONAL CLERGY.

Perfect, Rev. H. .. .. Bhagalpur.
Sage, Rev. W. H. .. .. Monghyr and Jamalpur.
Ethelred Judah, Rev. E. A. .. .. .. Muzaffarpur and Darbhanga
Beussher, Rev. Robert .. .. Ranchi.

Burma Ecclesiastical Department.

Fyffe, The Right Reverend Rollestone Sterritt, M.A. Lord Bishop of Rangoon.
Cowper-Johnson, Rev. Wilfrid Harry, M.A. . .. Archdeacon of Rangoon, and Bishop's Commissary.

And 6 Junior Chaplains.

Central Provinces Ecclesiastical Department.

Wood, Right Reverend Alex, M. A., O.B.E., D.D. Lord Bishop of Nagpur.
Ledgard, Rev. Ralph Gilbert, M.A. .. .. Archdeacon.

CHAPLAINS.

Wradell, Rev. A. F. G. .. .. (On leave.)
Carter, Rev. B. B., M.A. .. .. Mhow.
Horwood, Rev. K. C. .. .. Jubbulpore.
Clarke, Rev. R. C. B., M.A. .. .. (On leave.)
Roberts, Rev. A. B. .. .. Nagpur.
Bridges, Rev. F. L., M. A. .. .. .. Services placed at the disposal of Government United Provinces.
Martin, Rev. F. W. .. .. Kamptee.
Day, Rev. E. R., M.A. .. .. Second Chaplain, Nasirabad.
Warmington, Rev. G. W. .. .. Mhow.
Gibson, Rev. H. J. .. .. Saugor.

North-West Frontier Ecclesiastical Department.

SENIOR CHAPLAIN.

Carden, Rev. H. C. .. .. Abbottabad.

And 6 Junior Chaplains.

Punjab Ecclesiastical Department.

Durrant, The Right Reverend H. B., M.A., D.D. .. Lord Bishop of Lahore.
Wheeler, The Ven'ble Canon Hugh Trevor, M.A. .. Archdeacon, Lahore.

SENIOR CHAPLAIN.

Buckwell, Rev. Frederick Charles .. .. .. (On leave.)
Maunsell, Rev. Arthur Persse Gabbett, B.D. .. (On leave.)
Williams, Rev. James Ernest Harris, M.A. .. .. (On leave.)
Dixon, Rev. Thomas Harold, M.A. .. .. .. Delhi.
Barne, Rev. George Dunsford, M.A. .. .. On Foreign service.
England, Rev. Herbert George, M.A. .. .. Karachi.
Strand-Jones, Rev. John, B.A. .. .. .. Dalhousie.
Hemming, Rev. Charles Henry .. .. .. Simla.
Kerr, Rev. George Henry Bruce, B.A. .. .. (On leave.)
Spooner, Rev. H. F. .. .. (On leave.)
Carden, Rev. Henry Craven, M.A. .. .. .. Abbottabad.
McKelvie, Rev. Robert Fritz Stanley, M.A., B.D. .. (On leave.)
Lister, Rev. J. G., M.A. .. .. Lahore.
Marshall, Rev. Norman Edwyn .. .. .. Rawalpindi.
Johnston, Rev. H. F. .. .. Quetta.
Devenish, Rev. R. C. S. .. .. Nowshera.
Gorrie, Rev. L. M. .. .. Simla.

And 222 Junior Chaplains.

United Provinces Ecclesiastical Department.

Vacant .. .. Bishop of Lucknow.
Bill, The Ven'ble S. A., M.A. .. .. .. Archdeacon of Lucknow.
Westmacott, R. .. .. Registrar of the Diocese of Lucknow

SENIOR CHAPLAINS.

Irwin, The Ven'ble Benjamin Christopher Bulteel, M.A. Kashmir.
Padfield, Rev. George Augustus Selwyn .. .. Chaubattia
Meyler, Rev. Edward Mowbray, B.A. .. .. (On leave.)
Cotton, Rev. Ben, M.A. .. .. Allahabad.
Smith, Rev. Francis Herbert, M.A. .. .. (On leave)
Bridges, Rev. Francis Llewellyn .. .. .. Ranikhet.
Bill, The Ven'ble Sidney Alfred, M.A. .. .. Naini Tal.
Cohu, Rev. Clifford John , M.A. .. .. .. Lucknow, (Civil.)
Maynard, Rev. Bertram Martin .. .. .. Cawnpore
Dunlop, Rev. Douglas Lyall Chandlee, M.A. .. Lucknow, (Cantt.)
Talbot, Rev. Alfred Dixon .. .. (On leave.)

And 13 Junior Chaplains with 8 Additional Clergy.

CHURCH OF SCOTLAND.

Ingram, Rev. J. W., M.A., B.D. .. .. .. Attached, Army Department, Meerut.
Janvier, Rev. C. A. R., M.A. .. .. .. Allahabad.

Wesleyan Chaplains.

Rev. A. J. Reynell, O.B.E., Superintending Wesleyan Chaplain in India .. .. Simla.
„ A. W. Buckley, Offg. Supdt., Wesleyan Chaplain in India .. .. Rawalpindi.
„ A. D. Brown .. .. Leave *ex.* India
„ A. Yeomans Wright, M.B.E.. .. .. Bombay.
„ W. E. Cullwick, H.C.F. .. .. Kirkee.
„ F. E. Poad .. .. Quetta.
„ J. Dwyer Kelly, H.C.F. .. .. Jubbulpore.
„ J. H. Munro, H.C.F. .. .. Lahore.
„ R. H. Spence, H.C.F. .. .. Jhansi.
„ R. T. Kerr, H.C.F. .. .. Peshawar.
„ F. S. Briggs .. .. Mhow.
„ J. M. Darlington .. .. Calcutta.
„ J. D. Percy, B.A., H.C.F. .. .. Bangalore.
„ G. L. Frost .. .. Meerut.
„ A. Blain .. .. Bombay.
„ E. C. Horler .. .. Secunderabad.
„ F. E. C. Hampson .. .. Madras.
„ W. Horner .. .. Lucknow.
„ Cliford Lever.. .. .. Delhi.

THE ROMAN CATHOLIC CHURCH.

With regard to numbers, the *Catholic Directory of India*, 1924, gives the following tables:—

—	1901	1911	1921
1. *British India and Indian States*—			
(*a*) Latin Rite	1,312,224	1,614,620	1,851,408
(*b*) Syriac Rite	315,923	364,660	440,488
2. *French India*	25,859	25,918	25,480
3. *Portuguese India*	262,650	296,148	288,741
Total, India	1,916,656	2,301,346	2,606,117
4. Ceylon	285,018	322,163	363,986
Total, India and Ceylon ..	2,201,674	2,623,509	2,970,103

NOTE (1):—In 1860, the total for India and Ceylon was 1,170,854. In 1880 it had risen to 1,610,265 and in 1900 to 2,201,674.

NOTE (2):—In 1926 the total for India and Ceylon has been worked out at 3,241,744, showing an increase of quarter of a million in five years.

NOTE (3):—The number of Catholics under the Royal Patronage of Portugal (the Padroado) in 1921 were reckoned at 604,802, of whom more than half are in British India.

NOTE (4):—In 1860 there were 1,504 priests. In 1921 there were 3,156.

The Catholic community as thus existing is composed of the following elements:—

(1) The "Syrian" Christians of the Malabar Coast, traditionally said to have been converted by the Apostle St. Thomas. They were brought under allegiance to the Pope by the Portuguese in 1599, and placed first under Jesuit bishops and then under Carmelite Vicars Apostolic. They are at present ruled by an Archbishop and three suffragan Bishops of their own Syriac rite.

(2) Converts of the Portuguese missionaries from 1500 and onwards, starting from Goa and working in the south of the peninsula and up the west coast, Ceylon, Bengal, etc.

(3) European immigrants at all times, including British troops.

(4) Modern converts from Hinduism and Animism in recent mission centres.

The Portuguese mission enterprise, starting after 1500, continued for about 200 years, after which it began to decline. To meet this decline fresh missionaries were sent out by the Congregation *de propaganda fide*, till by the middle of the 19th century the whole country was divided out among them except such portions as were occupied by the Goa clergy. Hence arose a conflict of jurisdiction in many parts between the Portuguese clergy of the "Padroado" or royal patronage, and the propaganda clergy. This conflict was set at rest by the Concordat of 1886. At the same time the whole country was placed under a regular hierarchy, which after subsequent adjustments now stands as follows:—

Of the **Portuguese Jurisdiction**:—

The archbishopric of Goa (having some extension into British territory) with suffragan bishoprics at Cochin, Mylapore and Damaun (all three covering British territory).

Of the **Propaganda Jurisdiction**:—

The archbishopric of Agra with suffragan bishoprics of Allahabad and Ajmere.

The archbishopric of Bombay, with suffragan bishoprics of Poona, Mangalore, Calicut, Trichinopoly, and Tutticorin.

The archbishopric of Calcutta, with suffragan bishoprics of Dacca, Krishnagar and Patna; and the Prefecture Apostolic of Assam.

The archbishopric of Madras, with suffragan bishoprics of Hyderabad, Vizagapatam and Nagpur.

The archbishopric of Pondicherry (French) with suffragan bishoprics of Mysore, Coimbatore and Kumbakonam.

The archbishopric of Simla with suffragan bishopric of Lahore and the Prefecture Apostolic of Kashmere.

The archbishopric of Colombo (Ceylon) with suffragan bishoprics at Kandy, Galle, Jaffna and Trincomalee.

The archbishopric of Verapoly, with suffragan bishopric of Quilon.

One archbishopric and three bishoprics of the Syriac rite for the Syrian Christians of Malabar.

Three Vicariates Apostolic of Burma.

Propaganda changes:—

New dioceses formed:—Tuticorin by division of Trichinopoly; Calicut by division of Mangalore; Chittagong by division of Dacca; Dinajpur by division of Krishnagar; Ranchi by division of Calcutta. Other changes are planned in the Central Provinces, Burma, etc., but are not yet carried out.

Padroado changes:—

In May 1928 an agreement was made between the Holy See and Portugal to modify the arrangements of the Concordat of 1886. The diocese of Damaun is merged in the Archdiocese of Bombay, and a complete readjustment is to take place in relation to Malapore and Madras, the main object being to obliterate "double jurisdiction." At the time of revising these notes, however, these changes have not come into effect.

The European clergy engaged in India almost all belong to religious orders, congregations or mission seminaries, and with a few exceptions are either French, Belgian, Dutch, Swiss, Spanish or Italian by nationality. They number about 1,000 besides which there is a body of secular clergy mostly native to the

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Last year the field staff numbered 314 missionaries, 7,064 Native workers. There were 1,892 Churches of which 1,272 were self supporting. Church members number 1,27,828. In the 2,107 Sunday Schools were enrolled 9,60,000 pupils. The Mission conducted 2,741 schools of all grades with 91,091 students enrolled. 14 Hospitals and 34 Dispensaries treated 6,364 in-patients and 1,05,879 out-patients. Indian Christians contributed over Rs. 6,74,000 for this religious and benevolent work during the year.

THE AMERICAN BAPTIST ASSAM MISSION was opened in 1836. and has 13 main stations staffed by about 45 missionaries. There are 725 Native workers, 384 organized churches, 37,149 baptised members, 318 Schools of all grades including 1 High, 2 Normal, 2 Bible and 13 Station schools. 3 Hospitals and 8 Dispensaries treated 326 in-patients and 18,032 out-patients during the year. Mission work is carried on in 9 different languages.

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AMERICAN BAPTIST, BENGAL-ORISSA MISSION, commenced in 1836. Area of operation : Midnapore district of Lower Bengal, Balasore district of Orissa and Jamshedpur Mission staff 30, Indian workers 300. Two English Churches and 25 Vernacular Churches, Christian Community 5,000. Two dispensaries. Educational: One Theological and two Boys' High Schools and two Girls' High Schools and 118 Elementary Schools, pupils 3,360. One Industrial School for carpentering, iron work and motor mechanics. The Vernacular Press of this mission printed the first literature in the Santali language.

Secretary : Rev. H. I. Frost, Balasore, Orissa.

THE AMERICAN BAPTIST TELUGU MISSION.—Was commenced in the year 1836, and covers large parts of Nellore, Guntur, Kistna, and Kurnool Districts, parts of the Deccan and an important work in Madras and the surrounding vicinity. Its main work is evangelism, but there are also Educational and Medical Institutions of importance. Industrial Settlement work for the Erukalas is carried on at Kavali and vicinity. Industrial departments are maintained also in connection with the Mission High Schools at Nellore, Ongole and Kurnool. Organized Telugu Churches number 236, with 88,713 baptized communicants. There are 102 missionaries, and 2,190 Indian workers. The mission maintains a Theological Seminary at Ramapatnam for the training of Indian preachers. A Bible Training School for the training of Telugu women is located in Nellore. A total of 32,689 receive instruction in 1,270 primary schools, 16 secondary schools and 4 high schools. In Medical work 8 Hospitals and 12 Dispensaries report 3,823 in-patients, 47,286 out-patients, and 115,073 treatments during the year.

Secretary : Miss E. J. Draper, Nellore.

THE AUSTRALIAN BAPTIST MISSION.—With 2 missionaries, established at Serajgunge, E. Bengal.

Missionary-in-charge : Rev. T. C. Kelly, Mission House, Serajgunge.

THE AUSTRALIAN BAPTIST FOREIGN MISSION.—(Incorporated) Embracing the societies representing the Baptist Churches of the States of the Australian Commonwealth. The field of operations is in East Bengal. The staff numbers 43 Australian workers. There are 2,586 communicants and a Christian community of 5,553.

Secretary, Field Council: Rev. P. F. Lanyon, Mymensingh E. B.

THE STRICT BAPTIST MISSION.—Has 15 European Missionaries, and 120 Indian workers in Madras, and Salem District. Communicants number 270 ; organised Churches 8 ; elementary schools 41, with 1,625 pupils.

Treasurer and Secretary : Rev. D. Morling, Namakal, S. India.

PRESBYTERIAN SOCIETIES.

THE IRISH PRESBYTERIAN CHURCH MISSION.—Operates in Gujarat and Kathiawar with a staff of 41 Missionaries of whom 7 are qualified doctors and an Indian staff of 404 including school teachers. There are 10 Organised Churches, a communicant roll of 1,828, and a Christian community of 7,143. In Medical work there are 3 Hospitals, 6 Dispensaries, with 1,238 in-patients and 11,064 new cases and a total attendance of 43,033. The Mission conducts 3 High schools, 2 Anglo-Vernacular schools and 123 Vernacular schools affording tuition for 6,610 pupils. 4 Orphanages, a Divinity College at Ahmedabad, a Teachers' Training College for Women at Borsad and a Mission Press at Surat. The Mission has made a speciality of Farm Colonies, of which there are about a score in connection with it, most of them thriving.

The Jungle Tribes Mission with 6 missionaries is a branch of the activities of the above, working in the Panch Mahals and Rewa Kantha districts, with Farm Colonies attached.

Secretary: G. Wilson, Ahmedabad.

THE UNITED PRESBYTERIAN CHURCH OF NORTH AMERICA.—The Sialkot Mission of the above Church was opened at Sialkot, Punjab, in 1855. It is now carrying on work in ten districts of the province and one in the N. W. F. Provinces. Its missionaries number 171, and its Indian workers 876. Its educational work comprises one Theological Seminary, one College, six High Schools, one Industrial School, nine Middle Schools, and 195 Primary Schools. The total enrolment in all schools was 15,371 in 1926. The Mission is also carrying on Medical work through six hospitals and eight dispensaries. The total Christian community in connection with the Mission is 84,322 and Church-membership 34,287.

General Secretary: Rev. W. D. Mercer, Gujranwala, N. Punjab.

THE AMERICAN PRESBYTERIAN MISSION operates in 3 main sections known as the Punjab, North India and Western India Missions. The American Staff (including women) numbers 270 and the Indian Staff 1,352. There are 35 main stations and about 240 out-stations. Organized churches number 82, 25 of which are self-supporting. There are 11,985 communicants and a total baptized community of 82,000. Educational work as follows: 2 Men's Colleges, and an interest in the Isabella Thoburn and the Kinnaird Colleges for women, students 1,820, Theological School 1, students 24; Training Schools for village workers 2, students about 180; High Schools 14, students about 2,100; Industrial Schools 4; Agricultural Demonstration Farms 4; Teachers' Training Departments 7; The Miraj Medical School and an interest in the Ludhiana Medical School for women, students 170; Elementary Schools 230; Schools of all grades 241, pupils 12,023; Medical work: Hospitals 6; Dispensaries 17. Sunday Schools 371 with 13,491 pupils. Contributions for Church and Evangelistic work on the part of the Indian Church, Rs. 51,422.

The Hospital at Miraj, founded by Sir William Wanless, and now under the care of C.E. Vail, is well-known throughout the whole of S.W. India, and the Forman Christian College at Lahore under the principalship of Rev. E. D. Lucas, D. D., is equally well-known and valued in the Punjab. The Ewing Christian College (Dr. C. A. R. Janvier, Principal) has grown rapidly in numbers and influence.

Secretary of Council of A.P. Missions in India, Rev. H. C. Velte, M.A., D.D., Saharanpur.

Secretary, Punjab Mission: Rev. W. J. Weir, M.A., Lahore.

Secretary, North India Mission: Rev. W. T. Mitchell, M. A., Mainpuri, U. P.

Secretary, Western India Mission: Rev. H. K. Wright, M.A., Ahmednagar.

THE NEW ZEALAND PRESBYTERIAN MISSION:—Commenced as recently as 1910 at Jagadhri, Punjab.

Secretary: Miss A. E. Henderson, Jagadhri, Dist. Ambalia.

THE UNITED CHURCH OF CANADA MISSION—Commenced in 1877 has 12 main stations in Indore, Gwalior, Rutlam, Dhar, Jaora, Sitamau and Banswara. The Mission staff numbers 73; Indian workers 290. This Mission works in conjunction with the Malwa Church Council of the United Church of Northern India, which reports for this part of its territory. Organised Churches 14. Unorganised Churches 13, Communicants 1,445, Baptised non-communicants 4,013. Total Christian community 5,832.

Educational work comprises Elementary and Middle Schools, High Schools for boys and girls, College, Theological Seminary and Classes. Industrial teaching and work are done in the three Girls' Boarding Schools, women's industrial work in Mhow and Rutlam and in Rasalpura Boys' School. Technical and practical training is given in Printing, Weaving and Carpentry. The Medical work is large. There are three General Hospitals, where both men and women are treated, and five Women's Hospitals and also a number of dispensaries in central and out-stations.

Secretary of Mission.—Rev. J. T. Taylor, D.D., Indore, C. I.

Secretary of Church.—Rev. C. D. Donald, B. D., Kharua (Dt. Indore), C. I.

THE CANADIAN PRESBYTERIAN BHIL MISSION Alirajpur, Jobat and Barwani States are now under the Canadian Presbyterian Bhil Mission.

Secretary:—Rev. J. Buchanan, M.D., D.D. (on furlough); E. Toombs, Amkhut, Alirajpur, C. I.

THE WELSH CALVINISTIC METHODIST (PRESBYTERIAN) MISSION established in 1840 with a staff of 40 Missionaries, 950 Indian workers, occupies stations in Assam in the Khassia and Jaintia Hills, the Lushai Hills and at Sylhet and Cachar. The Khassia language has been reduced to writing, the Bible translated, and many books published in that language by the Mission. A large amount of literature has also been produced in the Lushai language. Communicants number 29,850; the total Christian community 81,461; organised Churches 650: Elementary schools number 626, Scholars 17,209: in addition

country, numbering about 2,000 and probably about 2,000 nuns. The first work of the clergy is parochial ministration to existing Christians, including railway people and British troops. Second comes education, which is not confined to their own people; their schools being frequented by large numbers of Hindus, Mahomedans, Parsis, etc. Among the most important institutions are St. Xavier's College, Calcutta, St. Peter's College, Agra, St. Xavier's College, Bombay, St. Joseph's College, Trichinopoly, St. Aloysius College, Mangalore, Loyola College, Madras, teaching university courses; besides a large number of high schools and elementary schools. The education of girls is supplied for by numerous convent schools worked by religious congregations of nuns to say nothing of orphanages and other charitable institutions. The total number under education amounted in 1904 to 143,051 boys and 73,164 girls, later figures being unavailable. As to missionary work proper, the country is covered with numerous modern mission centres, among which those in the Punjab, Chota Nagpur; Krishnagar, Gujerat, the Ahmednagar district and the Telugu coasts may be mentioned. (Full particulars on all points will be found in the Catholic Directory already quoted.) The mission work is limited solely by shortage of men and money, which if forthcoming would give the means to an indefinite extension. The resources of the clergy after the ordinary church collections and pay of a few military and railway chaplaincies are derived mainly from Europe, that is, from the collections of *the Society for the Propagation of the Faith* and of *the Holy Childhood*; helped out by private or other donations secured from home by the different local missionaries. In mission work the fathers count as enrolled only those who are baptised and persevering as Christians, and no baptism, except for infants or at point of death, is administered except after careful instruction and probation. This, while keeping down the record, has the advantage of guaranteeing solid results.

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THE SCOTTISH CHURCHES.

The Church of Scotland.—The Chaplaincy work of the Church of Scotland dates from 1814, when the Rev. Dr. Bryce landed in Calcutta, and organised a congregation of his Scottish fellow countrymen. The centenary of the churches in the three Presidency towns was celebrated: Calcutta, 1914: Bombay, 1919; Madras, 1921. Since 1903 there have been eighteen chaplains on the staff, of whom nine belong to the Bengal Presidency, five to Bombay, and four to Madras. These minister both to the Scottish troops and to the civil population of the towns where they are stationed, but when there is a Scottish regiment the chaplain is attached to the regiment, instead of being posted to the station where the regiment happens to be placed and as a rule moves with the regiment. There are three Preidency senior Chaplains in charge of Bengal, Bsombay, and Madras respectively. There are churches in the chief towns of the Presidencies, and churches have also been built, in all considerable military stations, *e.g.*, Chakrata, Lucknow, Peshawar, Ranikhet, Rawalpindi, Sialkot, Umballa and Jubbulpore. In addition to the regular establishment there are a number of acting Chaplains sent out by the Colonial Committee of the Church of Scotland, and these are serving in such stations as Rawalpindi, Lahore, Cawnpore, Meerut, Mhow and Quetta. The Additional Clergy Societies in India contribute towards the cost of this additional establishment. In other places such as Sialkot, Murree, Dalhousie, and Darjeeling, regular services are provided by Scottish Missionaries. Simla has a minister of its own sent out from Scotland.

The Mission work of the Church of Scotland dates from 1829, when Alexander Duff, one of the greatest of modern missionaries, was sent to Calcutta. He was the first to open schools where English was made the medium for instruction; and where religious teaching was given daily. Similar educational missions were soon afterwards started in Bombay and Madras. Educational work is still an important branch of the mission work of the Church, but the Bombay College was closed in 1819 and in 1907 the College in Calcutta was united with the College of the United Free Church of Scotland, to form the Scottish Churches College. In the Punjab Evangelistic work is being carried on from eight centres under seventeen missionaries. The baptised Christian community now numbers over 14,000. Work commenced in Darjeeling in 1870 is now carried on throughout the whole Eastern Himalayan district, and there is a Christian community there of over 8,000. In the five mission districts of Calcutta, the Eastern Himalayas, Madras, Poona, and the Punjab there were at the end of 1919 over 24,787 baptised Indian Christians. In connection with these missions the Women's Association of Foreign Missions does invaluable service, in school, medical and zenana work, having in India 41 European missionaries, 163 teachers, over 50 schools, three hospitals and six dispensaries.

The Church of Scotland has also done much to provide education for European children in India. Together with the United Free Church, St. Andrew's Church has six representatives on the governing body of the Anglo-Scotish Education Society, and the two churches exercise pastoral supervision over the Bombay Scottish Orphanage. In Bangalore there is the St. Andrew's High School, and both in Bangalore and in Madras the local congregation supports the school for poor children. The Ayrcliff Girls' Boarding and High School is under the care of the Kirk-Session of St. Andrew's Church, Simla. The now well-known St.

Andrew's Colonial Homes at Kalimpong, Bengal, though not directly part of the work of the Church of Scotland, were initiated by and are being locally managed by missionaries of that Church. The homes exist for the benefit of the domiciled European Community, and are doing magnificent work. There are now twenty cottages, and about 600 children in residence. Further information may be found in "Reports of the Schemes of the Church of Scotland," Blackwood & Sons; "The Church of Scotland Year Book" and "The Handbook of the Church of Scotland in India and Ceylon."

The United Free Church of Scotland.—This branch of the Scottish Church has only three purely European congregations in India, two in Calcutta, Wellesley Square, and Howrah and one in Bombay, Waudby Road. In Calcutta the Howrah Church is in the district of the mills, and every effort is made to minister to the Scottish Engineers and other workers in the mills. As noted above members of these congregations co-operate with the Established Church of Scotland in providing education for European children.

The Church carries on Mission work in seven different areas. They are Bengal (Calcutta, Kalna and Chinsura); the Santal Parganas, with five stations; Western India (Bombay, Poona and Alibag); Hyderabad State (Jalna, Bethel and Parbhani); Madras (Madras City, Chingleput, Sriperumbudur and Conjeeveram); the Central Provinces (Nagpur, Bhandara, Wardha, and Amraoti); Rajputana, where the extensive work instituted by the United Presbyterian Church in 1860 is now carried on from eleven centres.

The work falls into three main divisions, evangelistic, medical, and educational. The Christian community has been organised in all the chief centres into congregations which form part of the Indian Presbyterian Church, and this Church is seeking to take an increasing share in the work of evangelism. There are nineteen Mission Hospitals, among which are four excellently equipped and staffed Women's Hospitals, in Madras, Nagpur, Ajmer, and Jaipur. From the days of Duff in Calcutta and Wilson in Bombay the Mission has given a prominent place to education. It has many schools in all parts of its field and it has also made a large contribution to the work of higher education through four Christian Colleges. The Scottish Churches College, Calcutta, is under the joint management of the Church of Scotland and the United Free Church. The Madras Christian College, which owes so much to the work of Dr. William Miller, is now under the direction of a Board representing several Missionary Societies. Wilson College, Bombay, with which the names of Wilson and Dr. Mackichan are specially associated and Hislop College, Nagpur, are under the direct management of the United Free Church.

BAPTIST SOCIETIES.

THE BAPTIST MISSIONARY SOCIETY OF GREAT BRITAIN.—Formed in 1792, largely through the efforts of Dr. Wm. Carey, operates mainly in Bengal, Bihar and Orissa, the United Provinces, the Punjab and Ceylon. The Baptist Zenana Mission and the Bible Translation Society have been united with this Society. The staff of the united Mission in India and Ceylon numbers 193 missionaries and about 1,689 Indian and Singalese workers. Connected with the Society are 339 Indian and Singhalese Churches, 264 Primary Day Schools, 25 Middle and High Schools, and 4 Theological Training Colleges. The Church membership at the close of 1927 stood at 20,461 and the Christian community at 59,317. The membership during the past ten years has increased by about 53 per cent. and the community by 50 per cent. in the same period. Amongst the non-caste people great progress has been made in recent years, and many of the Churches formed from amongst these peoples are self-supporting.

Special work amongst students is carried on in Calcutta, Dacca, Cuttack and Delhi, where hostels have been erected for the prosecution of this form of work.

EDUCATIONAL WORK.—Ranges from Primary School to Colleges. Serampore College, the only College in India able to bestow a theological degree granted under Royal Charter by His Danish Majesty in 1827, confirmed by the British Government in the Treaty of purchase of the Settlement of Serampore in 1845, and placed in 1856 by the College Council at the disposal of the Baptist Missionary Society to become a part of its Missionary Educational operations, Arts and Theological. It was affiliated in 1857 to the newly-formed Calcutta University; reorganised in 1910 on the lines of its original foundation with the appointment of a qualified Theological Staff on an Inter-denominational basis for the granting of Theological Degrees to qualified students of all Churches.

As the only College in India granting a Theological Degree a large number of students are now resident in the College. In Arts, the College prepares for the Calcutta Arts Examinations. *Principal* : Rev. G. Howells, M.A., B.D., B.LITT., PH.D.

There is a vernacular institute also at Cuttack for the training of Indian preachers and Bible schools in several centres.

There are 9 or 10 purely English Baptist Churches connected with the Society, but English services are carried on in many of the stations. Medical work connected with the Society is carried on in 6 Hospitals, and 8 Dispensaries. Two large Printing Presses for both English and Vernacular work are conducted at Calcutta and Cuttack. The Secretaries of the Mission are the Rev. John Reid and W. Craig Eadie, Esq., 48, Ripon Street, Calcutta.

The Headquarters of the Mission are at 19, Furnival Street, Holborn, London. The total expenditure of the Society for 1926 amounted to £239,684.

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AMERICAN BAPTIST, BENGAL-ORISSA MISSION, commenced in 1836. Area of operation: Midnapore district of Lower Bengal, Balasore district of Orissa and Jamshedpur Mission staff 30, Indian workers 300. Two English Churches and 25 Vernacular Churches, Christian Community 5,000. Two dispensaries. Educational: One Theological and two Boys' High Schools and two Girls' High Schools and 118 Elementary Schools, pupils 3,360. One Industrial School for carpentering, iron work and motor mechanics. The Vernacular Press of this mission printed the first literature in the Santali language.

Secretary: Rev. H. I. Frost, Balasore, Orissa.

THE AMERICAN BAPTIST TELUGU MISSION. —Was commenced in the year 1836, and covers large parts of Nellore, Guntur, Kistna, and Kurnool Districts, parts of the Deccan and an important work in Madras and the surrounding vicinity. Its main work is evangelism, but there are also Educational and Medical Institutions of importance. Industrial Settlement work for the Erukalas is carried on at Kavali and vicinity. Industrial departments are maintained also in connection with the Mission High Schools at Nellore, Ongole and Kurnool. Organized Telugu Churches number 236, with 88,713 baptized communicants. There are 102 missionaries, and 2,190 Indian workers. The mission maintains a Theological Seminary at Ramapatnam for the training of Indian preachers. A Bible Training School for the training of Telugu women is located in Nellore. A total of 32,689 receive instruction in 1,270 primary schools, 16 secondary schools and 4 high schools. In Medical work 8 Hospitals and 12 Dispensaries report 3,823 in-patients, 47,286 out-patients, and 115,073 treatments during the year.

Secretary: Miss E. J. Draper, Nellore.

THE AUSTRALIAN BAPTIST MISSION.—With 2 missionaries, established at Serajgunge, E. Bengal.

Missionary-in-charge: Rev. T. C. Kelly, Mission House, Serajgunge.

THE AUSTRALIAN BAPTIST FOREIGN MISSION.—(Incorporated) Embracing the societies representing the Baptist Churches of the States of the Australian Commonwealth. The field of operations is in East Bengal. The staff numbers 43 Australian workers. There are 2,586 communicants and a Christian community of 5,553.

Secretary, Field Council: Rev. P. F. Lanyon, Mymensingh E. B.

THE STRICT BAPTIST MISSION.—Has 15 European Missionaries, and 120 Indian workers in Madras, and Salem District. Communicants number 270; organised Churches 8; elementary schools 41, with 1,625 pupils.

Treasurer and Secretary: Rev. D. Morling, Namakal, S. India.

PRESBYTERIAN SOCIETIES.

THE IRISH PRESBYTERIAN CHURCH MISSION.—Operates in Gujarat and Kathiawar with a staff of 41 Missionaries of whom 7 are qualified doctors and an Indian staff of 404 including school teachers. There are 10 Organised Churches, a communicant roll of 1,828, and a Christian community of 7,143. In Medical work there are 3 Hospitals, 6 Dispensaries, with 1,238 in-patients and 11,064 new cases and a total attendance of 43,033. The Mission conducts 3 High schools, 2 Anglo-Vernacular schools and 123 Vernacular schools affording tuition for 6,610 pupils, 4 Orphanages, a Divinity College at Ahmedabad, a Teachers' Training College for Women at Borsad and a Mission Press at Surat. The Mission has made a speciality of Farm Colonies, of which there are about a score in connection with it, most of them thriving.

The Jungle Tribes Mission with 6 missionaries is a branch of the activities of the above, working in the Panch Mahals and Rewa Kantha districts, with Farm Colonies attached.

Secretary: G. Wilson, Ahmedabad.

THE UNITED PRESBYTERIAN CHURCH OF NORTH AMERICA.—The Sialkot Mission of the above Church was opened at Sialkot, Punjab, in 1855. It is now carrying on work in ten districts of the province and one in the N. W. F. Provinces. Its missionaries number 171, and its Indian workers 876. Its educational work comprises one Theological Seminary, one College, six High Schools, one Industrial School, nine Middle Schools, and 195 Primary Schools. The total enrolment in all schools was 15,371 in 1926. The Mission is also carrying on Medical work through six hospitals and eight dispensaries. The total Christian community in connection with the Mission is 84,322 and Church-membership 34,287.

General Secretary: Rev. W. D. Mercer, Gujranwala, N. Punjab.

THE AMERICAN PRESBYTERIAN MISSION operates in 3 main sections known as the Punjab, North India and Western India Missions. The American Staff (including women) numbers 270 and the Indian Staff 1,352. There are 35 main stations and about 240 out-stations. Organized churches number 82, 25 of which are self-supporting. There are 11,985 communicants and a total baptized community of 82,000. Educational work as follows: 2 Men's Colleges, and an interest in the Isabella Thoburn and the Kinnaird Colleges for women, students 1,820, Theological School 1, students 24; Training Schools for village workers 2, students about 180; High Schools 14, students about 2,100; Industrial Schools 4; Agricultural Demonstration Farms 4; Teachers' Training Departments 7; The Miraj Medical School and an interest in the Ludhiana Medical School for women, students 170; Elementary Schools 230; Schools of all grades 241, pupils 12,023; Medical work: Hospitals 6; Dispensaries 17. Sunday Schools 371 with 13,491 pupils. Contributions for Church and Evangelistic work on the part of the Indian Church, Rs. 51,422.

The Hospital at Miraj, founded by Sir William Wanless, and now under the care of C.E. Vail, is well-known throughout the whole of S.W. India, and the Forman Christian College at Lahore under the principalship of Rev. E. D. Lucas, D. D., is equally well-known and valued in the Punjab. The Ewing Christian College (Dr. C. A. R. Janvier, Principal) has grown rapidly in numbers and influence.

Secretary of Council of A.P. Missions in India, Rev. H. C. Velte, M.A., D.D., Saharanpur.

Secretary, Punjab Mission: Rev. W. J. Weir, M.A., Lahore.

Secretary, North India Mission: Rev. W. T. Mitchell, M. A., Mainpuri, U. P.

Secretary, Western India Mission: Rev. H. K. Wright, M.A., Ahmednagar.

THE NEW ZEALAND PRESBYTERIAN MISSION:—Commenced as recently as 1910 at Jagadhri, Punjab.

Secretary: Miss A. E. Henderson, Jagadhri, Dist. Amballa.

THE UNITED CHURCH OF CANADA MISSION—Commenced in 1,877 has 12 main stations in Indore, Gwalior, Rutlam, Dhar, Jaora, Sitamau and Banswara. The Mission staff numbers 73; Indian workers 290. This Mission works in conjunction with the Malwa Church Council of the United Church of Northern India, which reports for this part of its territory. Organised Churches 14. Unorganised Churches 13, Communicants 1,445, Baptised non-communicants 4,013. Total Christian community 5,832.

Educational work comprises Elementary and Middle Schools, High Schools for boys and girls, College, Theological Seminary and Classes. Industrial teaching and work are done in the three Girls' Boarding Schools, women's industrial work in Mhow and Rutlam and in Rasalpura Boys' School. Technical and practical training is given in Printing, Weaving and Carpentry. The Medical work is large. There are three General Hospitals, where both men and women are treated, and five Women's Hospitals and also a number of dispensaries in central and out-stations.

Secretary of Mission.—Rev. J. T. Taylor, D.D., Indore, C. I.

Secretary of Church.—Rev. C. D. Donald, B. D., Kharua (Dt. Indore), C. I.

THE CANADIAN PRESBYTERIAN BHIL MISSION Alirajpur, Jobat and Barwani States, are now under the Canadian Presbyterian Bhil Mission.

Secretary:—Rev. J. Buchanan, M.D., D.D. (on furlough); E. Toombs, Amkhut, Alirajpur, C. I.

THE WELSH CALVINISTIC METHODIST (PRESBYTERIAN) MISSION established in 1840 with a staff of 40 Missionaries, 950 Indian workers, occupies stations in Assam in the Khassia and Jaintia Hills, the Lushai Hills and at Sylhet and Cachar. The Khassia language has been reduced to writing, the Bible translated, and many books published in that language by the Mission. A large amount of literature has also been produced in the Lushai language. Communicants number 29,850; the total Christian community 81,461; organised Churches 650: Elementary schools number 626, Scholars 17,209: in addition

to Industrial Schools and Training Institutions and 2 Theological Seminaries. Three Hospitals and several Dispensaries provide annually for more than 10,000 patients.

Secretary: Rev. F. J. Sandy, Durtlang, Aijal.

THE ARCOT MISSION of the Reformed Church in America organised in 1853 occupies most of the North and South Arcot and Chittoor districts in S. India with a staff of 52 Missionaries and 718 Indian ministers and workers. Churches number 17, Communicants 5,527; total Christian community 20,761; Boarding schools 16, scholars 1,057; Theological school 1, students 30; Voorhees' College, Vellore, students 139. High schools 3, scholars 2,013; Training schools 2, students 92; Industrial schools 2, Agricultural Farm and School 1, total pupils 229; Elementary schools 221, scholars 8,497. Two Hospitals and 4 Dispensaries with a staff of 45 provided for 1,975 in-patients and 29,380 out-patients excluding the Union Medical College, Hospitals and Dispensaries, Vellore.

The Union Mission Medical College for South India and a Union Mission Training School are located at Vellore, the head quarter of the Mission. The Union Mission Tuberculosis Sanitarium for S. India is near Madanapalle, Arogiavaram P. O., Chittoor Dist.

Secretary : Rev. W. H. Farrar, Arni, S. India.

CONGREGATIONAL SOCIETIES.

THE AMERICAN BOARD OF COMMISSIONERS FOR FOREIGN MISSIONS.—Has two large Missions, the American Marathi Mission, and the Madura Mission. The Marathi Mission covers a considerable part of the Bombay Presidency, with centres at Bombay, Ahmednagar, Satara and Sholapur. It was commenced in 1813, the first American Mission in India. Its activities are large and varied. The staff at the beginning of 1928 consisted of 54 missionaries and 641 Indian workers operating in 8 Stations and 130 out-stations exclusive of Bombay City. Organised Churches number 68 with 9,289 communicants, and 6,709 adherents. There is a Leper work at Sholapur. The Educational work embraces 15 training and secondary schools, with 1,241 pupils and 136 primary schools, with 6,067 pupils, three-fifths of whom are non-Christians. A Theological College at Ahmednagar trains for the Indian Ministry. Zenana work and Industrial work are vigorously carried on, the latter embracing carpentry and lace work. A school for the blind is conducted on both Educational and Industrial lines. Sixty-six thousand patients were treated in the Hospitals and dispensaries of the Mission last year. This Mission was the first to translate the Christian scriptures into the Marathi tongue. At Sholapur, a settlement for Criminal Tribes is carried on under the supervision of Government. *Secretary*: Rev. William Hazen, M.A., Sholapur.

THE MADURA MISSION.—In the south of the Presidency founded in 1834, has a staff of 65 missionaries and 977 Indian workers, operates in the Madura and Ramnad Districts and has a communicant roll of 10,454 and a total Christian community of 29,240 and 33 organized Churches most of which are entirely self-supporting and self-governing. These Chruches are an integral part of the South India United Church. Schools number 323 with 17,280 pupils. In Madura there are a First Grade College, high and training schools for girls and hospitals for men and women. At Pasumalai, three miles from Madura, a high school, training school, theological institution, trade school and school of agriculture. Five elementary boarding schools are found in as many out-stations, industrial work is increasingly a part of the curricula of all schools above the lower grade. The Secretary is the Rev. John J. Banninga, M.A., D.D., Pasumalai.

THE ARCOT MISSION commenced under the American Board was transferred to the Reform Church of America in 1851.

THE SCANDINAVIAN ALLIANCE MISSION OF NORTH AMERICA.—Embraces two Branches, one in Bengal and the other in Khandesh. The mission staff in Khandesh is represented by fourteen missionaries, and forty Indian workers. There are seventy-five communicants, and a Christian community of about three hundred, thirteen elementary schools provide for two hundred and eighty pupils.

Secretaries: Rev. Paul Ringdahl, Amalner, East Khandesh; and Rev. Dover, Baksa Duar, Bengal.

THE SWEDISH ALLIANCE MISSION.—Working among the Bhils in West Khandesh has 20 missionaries and 71 Indian workers. There are 8 congregations with a total membership of 923 of whom 363 are communicants. There are 8 Elementary Schools, 2 Training Schools and 5 School Homes. The pupils in all schools are 355.

Secretary: Rev. Gustaf Westmo, Dondaiche, West Khandesh.

FREE CHURCH OF FINLAND MISSION.—Total Mission Staff is represented by 8 Missionaries, 3 native Pastors, two Catechists, two Teachers. There are about 120 communicants and total community 400. There are two day schools, one evening school, one hospital, four dispensaries, Weaving and Hand-Carder industries.

Secretary: Miss E. Kronqwist, Lachen, *via* Gangtok, Sikkim State.

THE LONDON MISSIONARY SOCIETY.—Commenced work in India in 1798 and occupies 3 centres in N. India, 12 in S. India and 7 in Travancore. The Mission engages in every form of Missionary activity.

The European staff numbers 135, Indian workers 2,380; Organised Churches 520; Communicants 21,824 and Christian Community 142,255. There are 1 Christian College, students 159; 2 Theological Institutions, students 70; 4 Training Institutions, pupils 114; 12 high schools, pupils 4,849; 25 Boarding schools, scholars, 1,167 and 862 Elementary schools with 46,371 scholars. In medical work Hospitals number 6, Dispensaries 14, qualified doctors 9 Europeans, 61 Assistants and 8,880 in patients and 198,757 out-patients for the year.

The main centres of the Mission in N. India are at Calcutta and Murshidabad L.M.S. work in the United Provinces is being closed but a Union Mission of the W. M. S., C. M. S. and L. M. S. is shortly to be opened in Benares City with the Rev. J. C. Jackson of the L. M. S. as Superintendent. This Mission will concentrate

especially on work amongst pilgrims and students. Special efforts are made amongst the Nama Sudras and the aboriginal tribes known as the Majhwars, Cheros and Pankas. The S. India district and Travancore are divided into the Kanarese, Telugu, Tamil, and Malayalam fields with 19 stations and 800 outstations. At Nagercoil (Travancore) is the Scott Memorial College with 985 students, a Church and congregation said to be the largest in India, and a large Printing Press, the centre of the S. Travancore Tract Society.

Bengal Secretary: Rev. Vaughan Rees, Behrampore. Dist. Murshidabad. *Benares Superintendent.*—Rev. J. C. Jackson, Benares, U. P.

ALL-INDIA MISSIONS.

THE CHRISTIAN AND MISSIONARY ALLIANCE.—Dates from the year 1893 under the name of the International Missionary Alliance, but a number of its missionaries were at work in Berar Province much earlier. Work is carried on in the Provinces of Berar, Khandesh, Gujarat. There is a staff of 75 missionaries and 145 Indian workers. The number of mission stations is 19, with additional out-stations. There is a Christian community of 2,306 adults. There are 4 Boarding Schools, 2 for boys and 2 for girls, 2 Training Schools for Indian workers and 1 English congregation at Bhusawal.

Executive Secretary: Rev. W. Moyser, Akola, Berar, C.P.

THE CHURCH OF THE BRETHREN (AMERICAN)—Opened work in 1895, and operates in Broach, Surat and Thana Districts, also in Baroda and Rajpipla States. Its staff number 60 foreign workers including missionaries' wives, and 235 Indian workers. The Baptized (immersed) membership stands at 3,564. Education is carried on in 7 Girls' Boarding Schools, 7 Boarding Schools for Boys, and 134 Village Day Schools. Females under instruction number 657, males 3,001, total under instruction 3,658. There are 85 Sunday Schools having 165 teachers and a total enrolment of 3,372. There were 28,115 calls at mission dispensaries in 1924. The foreign medical staff consists of five doctors, four nurses, and one medical Evangelist. At Umalla, Rajpipla State, there is a Home for Babies with 37 inmates. Industrial work is carried on in six of the Boarding Schools, and a vocational training school was opened at Anklesvar in June 1924. Evangelistic, Temperance and Publicity work receives due emphasis; the "Gujarati Sunday School Quarterly" (1,800 copies) and the "Prakash Patra," a Christian monthly of 400 copies, are published. *Secretary*: L. A. Blickenstaff, Bulsar, Surat District.

THE POONA AND INDIAN VILLAGE MISSION.—Founded in 1893. Mission Stations—Khed Shivapur, Poona District; Nasrapur (Bhor State), Poona District; Lonand, M. S. M. Ry., Satara District; Phaltan and Pandharpur, Sholapur District. The staff consists of 32 European and 43 Indian workers, with a community of about 38 Indian Christians and their families. The main work is evangelising in the villages, women's zenana work, and primary education. Medical work is conducted at each station, with a hospital at Pandharpur. *Headquarters*: Nasrapur, Poona District. *Secretary*: J. W. Stothard.

THE AMERICAN CHURCHES OF GOD MISSION.—Has two missionaries at Bogra, one at Khanjanpur, Bogra District, Bengal, and two at Uluberia, Howrah District.

Executive Secretary: Rev. Howard W. Cover, M.A., Bogra, E.B.R.

Recording Secretary: Rev. A. E. Myers, B.A., Ulubaria, Howrah.

THE INDIA CHRISTIAN MISSION.—Founded in 1897, has 41 Organised Churches, 17 Missionaries, 43 stations and out-stations, 1,759 Communicants, 45 Primary schools and one Industrial School in the Ellore District, also Bible Training Institute, Dodballapur, near Bangalore, S. India. stations also in Nuwara Eliya, Mulpotha Uva Province and Polgahawella, Ceylon; Girls' Orphanage at Nuwara Eliya; Industrial School for children of mixed parentage, Nuwara Eliya. Total Christian community 4.092. *Director*: Rev. A. S. Paynter, Nuwara Eliya, Ceylon.

THE CHURCH OF THE NAZARENE MISSION:—Has its headquarters for Western India at Buldana, Berar, where it has a Boys' Boarding School. It also has fifty girls in school. This Mission also has three stations in Thana District, namely Khardi, Vasind, and Murbad. At present there are only seven missionaries in this part of India, also 32 Indian preachers and Bible women.

President of the Council: Rev. A .D. Fritzlan' Buldana, Berar.

The headquarters for Eastern India are at Kishorganj, Mymensingh District, with an orphanage and a force of 4 missionaries: also about 11 Indian preachers and Bible women. This makes a total at present of 11 missionaries and about 43 Indian workers for The Church of The Nazarene in India.

President of the Council: Rev. G. F. Franklin Kishorganj, Mymensingh District.

THE TANAKPUR AND LOHAGHAT BIBLE AND MEDICAL MISSION—Was established in 1910. It is now carried on in Tanakpur and District only, that neighbourhood having again been attached to the Naini Tal District in Kumaon. *Address*: Tanakpur, Rohilkhand and Kumaon Railway, United Provinces.

THE HEPHZIBAH FAITH MISSIONARY ASSOCIATION—Has three missionaries in India. They are the Rev. S. V. Christenson, Adra, Mrs. S. V. Christenson, Adra, B. N. Rly., Manbhum, and Miss E. K. Landis, Raghunathpur, Manbhum.

THE TIBETAN MISSION—Has 4 Missionaries with headquarters at Darjeeling, and Tibet as its objective. *Secretary*: Miss J. Ferguson, Darjeeling.

THE INDIAN MISSIONARY SOCIETY OF TINNEVELLY (DORNAKAL MISSION)—Opened in 1904 operates in the Warangal District of the Nizam's Dominions as well as among the hill tribes called Paliars in the British and Travancore Hills. It is the missionary effort of the Tamil

Christians of Tinnevelly. There are now nearly 4,655 Telugu Christians in 109 villages and 384 Paliar Christians in the hills. *Secretary*: Rev. S. S. Moses, Palamcottah.

THE MISSION TO LEPERS—Founded in 1874, is an inter-denominational and international Society for the establishment and maintenance of Homes and Institutions for Lepers and of their untainted children working in 15 countries but largely in India, China, Korea and Japan. Its work in India is carried on through co-operation with 30 Missionary Societies. In India alone the Mission now has 37 Asylums of its own with upwards of 5,000 inmates and is aiding or has some connection with work for lepers at 23 other places in India. Altogether in India over 7,000 lepers are being helped.

The Mission also provides for the segregation of the healthy children of lepers from their diseased parents. More than 800 children are thus being saved from becoming lepers.

An important feature of the work of the Mission is the measure of successful medical treatment whereby early cases both adults and children are now benefiting.

Most of the Mission's income is received from voluntary contributions. Some funds are raised in India, but the bulk of the money expended by the Mission in India, is received from Britain, although the provincial Governments give regular maintenance grants.

There is an Indian Auxiliary of the Mission to Lepers, of which H. E. Lady Wilson, who represents the Bombay Presidency, is a Vice-President.

Hon. Treasurer: Henry F. Lewis, Esq., 12, Dalhousie Sq., Calcutta.

The General Secretary of the Mission is Mr. W. H. P. Anderson, 33, Henrietta St., Covent Garden, London, W. C. The Secretary for India is Mr. A. Donald Miller, Purulia, Behar.

THE REGIONS BEYOND MISSIONARY UNION.—An inter-denominational Society commenced work at Motihari, Behar, in 1900, and now occupies 6 stations and 6 out-stations in the Champaran and Saran Districts, with a staff of 17 European and 2 Indian Missionaries and 40 other Indian workers. The Mission maintains 1 Hospital, 1 Girls' Orphanage, 1 Boys' Orphanage and Boarding School with Carpentry industrial department, 1 M. E. School with 200 pupils. Communicants number 80. *Secretary*: Rev. Alex. L. Banks, Siwan, District Saran.

THE NATIONAL MISSIONARY SOCIETY OF INDIA—Established 1905, it has a staff of 25 Indian Missionaries and 86 helpers and Volunteers. Operates in Montgomery District (the Punjab), Nukkar Tahsil (U. P.), Haluaghat, Mymensingh District (Bengal), Jharsagudah (B. & O.), North Kanara, Mirajgaon and Karmala Talukas (Bombay), Parkal Taluq (Nizam's Dominions) and Tirupattur Taluk (N. Arcot). Christian community over 7,000 Thirtythree Elementary Schools and 1 High School with hostel, one printing press, one Dispensary and one Hospital. Annual expenditure Rs. 70,000. Supported by Indian Christians of all denominations and Provinces. Organs: *The National Missionary Intelligencer* (a monthly journal in English sold at Re. 1 per year post free), *Qasid* (a monthly journal in Persian Urdu) at Rs. 2-8-0, *Deepekai* (a monthly journal in Tamil and Kanarese) at 8 as. per year, post free.

Address: N. M. S. Office, Vepery, Madras.

General Secretary: Rai Bahadur A. C. Mukerji, B.A. *Offg. Secretary*: Thos. David, B.A., B.D.

THE SEVENTH DAY ADVENTISTS:—The Seventh-day Adventists commenced mission work in India in 1893, and now employ a staff of five hundred and forty-one workers European and Indian, including ninety-eight ordained and licensed ministers. Evangelistic and educational work is conducted in fifteen vernaculars, besides work for English-speaking peoples in the large cities. For administrative purposes, the work is organised into four Union Missions located as follows:—

Burma Union Mission of S.D.A. (J. Phillips, Superintendent). *Office address* 13, Franklin Road, Rangoon.

North-East India Union Mission of S.D.A. (G. G. Lowry, Superintendent). *Office address* 70, Circular Road, Ranchi.

North-West India Union Mission of S.D.A. (A. H. Williams, Superintendent), *Office address* 17, Abbott Road, Lucknow.

South India Union Mission of S. D. A. (H. Christenson, Superintendent) *Office address* 7, Cunningham Road, Bangalore,

The general headquarters for India and Burma is located at Salisbury Park, Poona. (A. W. Cormack, *President*; C. L. Torrey, *Secretary and Treasurer*. *Office address*: Post Box No. 15, Poona.) On the same estate is an up-to-date publishing house, devoted entirely to the printing of evangelical and associated literature. (Address: Oriental Watchman Publishing Association, Post Box No. 35, Poona). A large number of day and boarding vernacular and Anglo-vernacular schools are conducted in different parts of the country; and at Vincent Hill School, Mussoorie, European education is provided, a regular high-school course, with more advanced work for commercial and other special students, being available. In all the denominational boarding schools increasing emphasis is being laid on vocational work, the students being required to share in the domestic work of the institutions, and in many cases to engage in some trades or other work. Seven physicians, one maternity worker, (C.M.B.) and a number of qualified nurses are employed, regular medical work being conducted at fourteen stations. The baptised membership (adult) is 2,648, organised into 71 churches; and in addition a substantial community of enquirers is receiving systematic instruction. 213 Sabbath Schools are conducted with an enrolled membership of 5,137.

THE AMERICAN MENNONITE MISSION.—Established 1899, works in the C. Provinces. Mission staff numbers 33, Indian workers 80, Church members 1,300, 1 Industrial Training Institution, 1 High, School, 1 Vernacular Middle School and 1 Anglo-Vernacular Middle School, 1 Normal School, 1 Men's Home, 2 Homes for untainted children of lepers, 1 Bible School, 2

Orphanages 1 Widows' Home, 1 Leper Asylum; Elementary Schools, 9; Dispensaries, 6. Leper Clynics 2.

Secretary: Rev. J. N. Kaufman, Dhamtari, C. P.

THE GENERAL CONFERENCE—MENNONITE MISSION—Started in 1901 in the C. Provinces. Workers number 22; Leper, Medical, Orphan, Zenana, Evangelistic and Educational work carried on. *Secretary*: Rev. P. W. Penner, Janjgir, C. P.

THE KURKU AND CENTRAL INDIA HILL MISSION—Established 1890 in the C. P. and Berar, has a mission staff of 12, Indian workers 22, Churches 8, Communicants 163: Christian community 531; 2 Boarding schools with 88 boarders and 3 Elementary schools. *Secretary*: Rev. Carl Wyder, Ellichpur, Berar, C. P.

THE CEYLON AND INDIA GENERAL MISSION—Established 1892, occupies stations in India in Mysore State in the Coimbatore and Anantapur Districts and also stations in Panadura, Ceylon. Mission Staff 31: Indian workers 147, Churches 14, with Communicants 664, and Christian Community 2,719; Orphanages 5; Elementary schools 49, Pupils 1,566.

Secretary: A. Scott, Kadiri, S. India.

THE BOYS' CHRISTIAN HOME MISSION—Owes its existence to a period of famine, was commenced in 1899. Mission staff 17, Indian workers 125. There are elementary schools with three orphanages, two boys and one girl, and a Widows' Home, where Industrial training is given. There are four main stations—At Dhond, in the Poona District and at Bahraich, Orai and Benares in United Provinces. There are also 34 out-stations. *Director*: Rev. John E. Norton, Dhond, Poona District. *Secretary*: W. K. Norton, Benares, U. P.

Ladies' Societies.

ZENANA BIBLE AND MEDICAL MISSION.—This is an inter-denominational society, with headquarters, 33, Surrey Street, London, working among women and girls in six stations in the Bombay Presidency, 10 in United Provinces, and 3 in the Punjab. There are 89 European Missionary ladies on the staff and 29 Assistant Missionaries, 199 Indian teachers and nurses and 53 Bible women. During 1925 there were 3,442 in-patients in the five hospitals supported by the Society (Nasik, Benares, Jaunpur, Lucknow and Patna), but the Victoria Hospital, Benares, was closed. There were 24,668 out-patients, 98,494 attendances at the Dispensaries. In their 33 schools were 2,833 pupils, and there is a University Department at Lahore. The evangelistic side of the work is largely done by house to house visitations and teaching the women in Zenanas, 1,385 women were regularly taught and 1,385 houses were visited. The 57 Bible women visited 480 villages; the number of houses was 1,988; major operations 575; minor operations 977. Total expenditure £ 57,015-14-7.

Hon. Treasurer: The Lord Meston of Dunottar.

Secretaries: Rev. Dr. Carter, Rev. E. S. Carr, M.A. (Hon.), and Miss E. Marriner.

WOMEN'S CHRISTIAN MEDICAL COLLEGE, WITH WHICH IS INCORPORATED THE PUNJAB MEDICAL SCHOOL FOR WOMEN.—In 1894 the North India School of Medicine for Christian Women was opened in Ludhiana in order to give a Medical Education under Christian influences to Indian Women. Doctor Edith Brown, M.A., M.D., was its Founder and Principal. The School was Inter-denominational, and trained students for various Missionary Societies.

Clinical work was at first given at the Charlotte Hospital, which belonged to the Ludhiana Zenana and Medical Mission. The Memorial Hospital was opened in 1900, and has now 200 beds. In 1913 non-Christian Students were also admitted for training, and the name was modified to its present title given above.

In 32 years 160 medical students have qualified as doctors, besides compounders, nurses and dais. At present over 79 are in training as medical students, 21 as compounders, 50 as nurses, 59 as nurse dais and 6 indigenous dais. New laboratories have been built for clinical Pathology for Physiology and for Chemistry and Physiess and new quarters for the Sisters and Nurses. A new dispensary for out-patients has recently been opened.

THE MISSIONARY SETTLEMENT FOR UNIVERSITY WOMEN was founded in Bombay in 1895 to work among the higher class of Indian ladies. Its activities now include a hostel for woman students, in addition to educational, social, and evangelistic work, and a Holiday House for students and other ladies at Bordi-Gholvad, B. B. & C. I. Ry. *Warden*: Miss Gedge, J. P., Vacchagandhi Road, P. O. 7, Bombay.

THE RAMABAI MUKTI MISSION (affiliated with the Christian and Missionary Alliance Mission in 1925) the well known work of the late Pandita Ramabai, shelters about 600 deserted wives, widows and orphans, educating and fitting them to earn their living. The Mission is worked on Indian lines and carried on by Indian and European workers. Evangelistic work is carried on in the surrounding villages of Kedgaon, Poona District.

Miss M. Lissa Haslie, *Corresponding Secretary*.

Disciple Societies.

The India Mission Disciples of Christ, under the United Christian Missionary Society, St. Louis, U.S.A., began work in India in 1882. It works in the Central Provinces and South United Provinces. There are 86 Missionaries including missionaries' wives and 349 Indian workers. There are 14 Organised Churches with the membership of 2,385. There is a Christian community of 4,117. There are 7 Hospitals and 12 Dispensaries in which 141,264 in-patients and out-patients were treated last year. Two Orphanages and Industrial Homes show 375 inmates. A Boarding School for girls and one for boys and 3 Hostels for boys show 501 inmates. 2 Leper Asylums have 160 inmates. A Tuberculosis Sanitarium at Pendra Road admitted 95 patients during the year. An Industrial School is conducted at Damoh in connection with which a 400 acre farm is used for practical work. In the Home for women and children at Kulpahar needle work, gardening, etc., are taught in connection with which a large business is done each year. The Mission

Press at Jubbulpore printed about 3,000,000 pages of Christian Literature. There is a High School; also 8 Middle Schools, 28 Primary Schools with about 3,000 pupils.

The Australian Branch has 3 Mission Stations in the Poona District. The Great Britain and Ireland Branch in Mirzapur District of U.P. and Palamau District in Orissa. These two have no organised connection with the India Mission Disciples of Christ.

Secretary and Treasurer: W. H. Scott, Jubbulpore, C. P.

Undenominational Missions.

THE CENTRAL ASIAN MISSION. Objective: Salvation of Central Asia; from Afghanistan to Tibet (including N. E. portion of Peshawar District), North Kashmir, etc. Protestant Evangelical, Inter-denominational. Head-quarters in India, Mardan, N. W. F. P.; in London 52 Lincoln's Inn Fields. Branch Stations, Bandapur, N. Kashmir; Shigar, Baltistan. Founded and managed chiefly by officers who have served in Frontier parts.

THE FRIENDS' FOREIGN MISSION ASSOCIATION works in five stations of the Hoshangabad Division of the Central Provinces, and in two of the adjacent Bhopal State. There are 7 Churches, 9 missionaries, 173 members in full communion, 1,097 Christian adherents; 1 Boarding School for girls and 1 Industrial School for boys, 1 Anglo-Vernacular Middle School and 6 Primary Schools; and one hospital with dispensary attached and 1 village dispensary; a self-supporting weaving community at Itarsi and a Farm Colony at Makoriya, in Hoshangabad District. *Secretary*: G. W. Maw, Itarsi, C. P.

THE AMERICAN FRIENDS' MISSION with 6 Missionaries is working in Bundelkhand. *Secretary:* Miss E. E. Baird, Nowgong, C. I.

THE OLD CHURCH HEBREW MISSION was established in 1858, in Calcutta, and is said to be the only Hebrew Christian Agency in India. *Secretary:* The Chaplain, 11, Mission Row, Calcutta.

THE OPEN BRETHREN—Occupy 46 stations in the U. Provinces, Bengal, S. Mahratta, Godaveri, Delta, Kanarese, Tinnevelly, Malabar Coast, Coimbatore and Nilgiri Districts. They hold an annual Conference at Bangalore.

Lutheran Societies.

THE INDIA MISSION OF THE UNITED LUTHERAN CHURCH IN AMERICA.—Formerly American Evangelical Lutheran Mission, Guntur and Rajahmundry. Work is conducted in the East Godavari, West Godavari, Kistna, Guntur, Nellore and Vizagapatam Districts. Its Missionary staff consists of 106, including Missionaries' wives and 3,221 Indian workers. The baptised membership is 1,30,000. There are 928 Village Schools, 13 Boys' Boarding Schools, 7 Girls' Boarding Schools, 4 High Schools, a First Grade College with 600 students, 7 Bible and Secular Training Schools, a Theological Seminary, 1 Agricultural School, 5 Hospitals and 2 Mission Presses. *Chairman:* The Rev. Victor McCaulay, D.D., Tenali, Guntur District.

THE EVANGELICAL NATIONAL MISSIONARY SOCIETY OF STOCKHOLM, SWEDEN, founded in 1856, occupies the districts of Saugor, Betul, and Chindwara in the Central Provinces There are about 2,367 Church members constituted into an indigenous Church with 12 local congregations. The European and Indian staff numbers 30 and 177 respectively. One Theological Seminary for training catechists and pastors, and one Training School for training Bible Women. 23 Day Schools with 1,172 children. 48 Sunday Schools with 636 Christian and 1,223 non-Christian children. 11 Dispensaries with 27,505 patients during 1927. 3 Workshops, one of them with an aided Carpentry School. One Female Industrial School, one Widows' Home with 60 women, 8 Orphanages and one Boarding School for Christian children. At the end of 1927 there were 187 boys and 241 girls in these Institutions.

Secretary: Rev. G. A. Bjork, Chhindwara, C.P.

THE KANARESE EVANGELICAL MISSION with Headquarters at Mangalore, South Kanara, was organised on January 1st, 1919, to take over the Mission work done formerly by the Basel Evangelical Mission in two of her fields, namely, the Districts of South Kanara and South Mahratta. In 1926 a union was effected between the Home Board at Lausanne and Basel, and in July 1927, this mission handed back to the Basel Evangelical mission the two mission fields of South Kanara and South Mahratta. The last available figures are: 12 chief stations and 56 outstations with a total missionary staff of 35 and 412 Indian workers. There are 48 organised congregations with a total membership of 12,324, which gave a total contribution of Rs. 16,107-1-11 for church and mission work. Educational work embraces 72 schools, of which there are 3 High Schools. The total number of scholars is 8,626.

Medical work is done at Betgeri, South Mahratta, with a full staff and a hospital and two branch hospitals and dispensaries. A Women's and Children's Hospital was opened in June 1923 at Udipi, South Kanara, and has been enlarged of late.

The Mission maintains a Home-Industrial Department for women's work and a large Publishing Department at Mangalore with a bookshop and a printing press occupying some 150 hands and doing work in many languages.

Chairman: Rev. A. Schosser residing at Mangalore, S. K.

Secretary: Rev. E. Sikemeier, Basel Ev. Mission, Udipi, S. Kanara.

THE CHURCH OF SWEDEN MISSION was founded in 1874. Operated till 1915 in the Madura, Tanjore, Trichinopoly and Ramnad Districts. Since 1915 the Mission having taken full charge of the former Leipzig Evangelical Lutheran Mission field, working also in the Madras, Chingleput, Coimbatore, Salem, S. Arcot Districts with diaspora congregations in Rangoon, Penang, Kuala-Lumpur and Colombo.

L. E. L. M. (Leipzig Evangelical Lutheran Mission) re-entered into the work, in 1927. Hence the Church of Sweden Mission now works in the Trichinopoly, Coimbatore, Madura and Ramnad Districts with the diaspora congregations

at Colombo. The L. E. L. M. works in the Madras, Chingleput, South Arcot and Tanjore Districts with the diaspora congregations at Rangoon, Penang and Kuala-Lumpur.

The Church (Tamil Evangelical Lutheran Church) was constituted on 14th January 1919 and is working in connection with the two Missions.

CHURCH OF SWEDEN MISSION. European staff, 35; Schools, 132; Teaching staff, 233; Pupils, Boys, 4,688; Girls 1,293.

President.—Rev. J. Sandegren, M.A., B.D., "Gurukul," Kilpauk, Madras.

LEIPZIG EVANGELICAL LUTHERAN MISSION. European staff, 11; Schools, 10, Teaching Staff 96; Pupils, Boys 1,217; Girls, 669.

President. Rev. Provost Th. Meyner, Mayavaram.

INSTITUTIONS COMMON TO BOTH MISSIONS. School, 2; Teaching Staff, 29; Pupils, Boys, 72; Girls 329.

TAMIL EVANGELICAL LUTHERAN CHURCH. Organised churches, 45; Ordained Indian Ministers, 36; Other Indian workers, 107; Baptized membership, 25,938; Baptized membership Schools, 249; Teaching staff, 451; Pupils, 10,167 (boys 8,187, girls 1,980).

President: The Rt. Rev. Bishop D. Bexell, Trichinopoly.

THE INDIA MISSION OF THE EVANGELICAL LUTHERAN SYNOD OF MISSOURI, OHIO ANDO. O.S. is located in North Arcot, Salem and Tinnevelly Districts, in Travancore, in Cochin, and the Kolar Gold Fields, with 25 missionaries, 1 nurse, one deaconess-nurse (American), 1 doctor (Indian), 1 Zenana worker, 1 American teacher in charge of Missionary Home for children, and 1 Lady educationist. Besides the three Training Institutes there are one complete and one incomplete High Schools, and among the Elementary Schools three complete Higher Elementary. In addition to evangelistic and educational work, the Mission has now an up-to-date Dispensary and Lying-in Hospital with 18 beds in Ambur and a Theological Seminary (24 students, besides 4 students doing active field work). *Secretary:* Rev. R. W. Goerss, Nagercoil, S. Travancore.

THE DANISH MISSIONARY SOCIETY.—Established 1863 in South Arcot, working there and in North Arcot, on the Shevaroy Hills and in Madras, has a total staff of 367 Indian and 49 European workers, Communicants 1,826, Christian community 4,640, 1 High School, 3 Boarding Schools, 2 Industrial Schools, 1 Orphanage, 2 Hostels and 97 Elementary Schools, 1 Theological Seminary and 2 Hospitals; total scholars 4,970.

President: Rev. P. Lange, B.A., B.D., Nellikuppam.

Treasurer: Rev. C. Bundslev, B.A., B.D., Tirukoilur.

THE SANTAL MISSION OF THE NORTHERN CHURCHES (formerly known as the India Home Mission to the Santals)—Founded in 1867, works in the Santal Parganas, Goalpara (Assam), Malda and Dinajpur. Work is principally among the Santals. The mission staff numbers 27; Indian workers 480; communicants 4,000; Christian community 23,000; organised churches 36; boarding schools 4; pupils 508; elementary schools 69; pupils 1,035; industrial schools 2; Orphanage 1; children 29. *Secretary*: Rev. P. O. Bodding, Dumka, Santal Parganas.

MISSIONS AND ENEMY TRADING ACT.—In May 1918, the following notice regarding Missions was published in the "Gazette of India":—"The following missions or religious associations are declared companies under Act 2 (the Enemy Trading Act) of 1916:—The Leipzig Evangelical Lutheran Mission, Madras, the Hermansberg Evangelical Lutheran Mission, Madras, the Schleswig-Holstein Evangelical Lutheran Mission, Madras, the Gosner Evangelical Lutheran Mission of the United Provinces and Behar and Orissa, the German Evangelical Lutheran Mission of Ranchi, Behar and Orissa. The Governor-General in Council notifies that the powers conferred under Section 7 of the said Act shall extend to the property, movable and immovable, of these missions or religious associations."

In June, 1919, the Government of India stated:—"Effect is already being given to the suggestion that enemy missions in India should be taken over by British societies. The properties and undertakings of hostile missions have been vested in the Provisional Custodian of Enemy Property with a view to their transfer to boards of trustees composed partly of non-official members nominated by the National Missionary Council of India with the approval of the Government of India and partly of Government officials, and those Boards of Trustees will in due course transfer the undertakings and properties to a missionary society to be selected by them with the approval of the Governor-General in Council.

Methodist Societies.

The Methodist Episcopal Church is the organization in the United States of America which grew out of the Wesleyan revival in England and her American colonies during the latter part of the eighteenth century. This Church began its work in India in 1856, at first confining its activities to what is now the United Provinces. From that centre it spread until the outposts of its work were found in Baluchistan, Burma, Malaysia, Netherlands Indies and the Philippine Islands. In 1920 a rearrangement of the mission field of the Church separated India, Burma and Baluchistan into what is now known as the Southern Asia division. Within this present field the Church now has a total baptized Christian community of over half a million of whom approximately 20,000 were baptised the year ending 1926.

The avowed task of the Church has been the uplift of the depressed classes, and its work has been largely among that class. As a matter of fact, however, it has large numbers who came from the Mohammedans and the caste Hindus, and among such its influence is extending.

The educational work of the Church is extensive, it having in this area a total of 1,301 schools of all grades, including three colleges twenty-two high schools, and numerous normal training and the logical institutions. The registered attendants in these schools number 42,529.

Special effort is made for the instruction and development of the young people of the Church, there now being 483 chapters of the Epworth League with 20,253 enrolled members, and 5,345 organized Sunday Schools with an enrolment 159,520.

The publishing interests of the Church are represented in two presses at Madras and Lucknow, the former doing work in four vernaculars and the latter in six. The periodicals issued cover the interests of both the evangelistic and the educational field, the Indian Witness, the Junior Methodist and Methodist Education being in English, while the Kaukab-i-Hind, the Rafiq-i-Niswan, the Bal Hit Karak, and other periodicals for women and children are issued in several of the vernaculars.

The governing body of the Church is the General Conferences held quadrennially in America in which the ten conferences now existing in India are represented by twenty-eight delegates. The polity of the Church in India looks forward to complete independence under the general governing body, there at present being but about three hundred and fifty American men and women as compared to 480 ordained and 3,162 unordained Indian and Burmese workers. At present the area is divided into seventy-two districts each in charge of a superintendent and among whom are many Indians. The work is supervised by four Bishops, elected by the General Conference, and resident as follows: Bishop Frank W. Warne, Bangalore; Bishop John W. Robinson, Delhi; Bishop Frederick B. Fisher, Calcutta; and Bishop Brenton T. Badley, Bombay.

THE AMERICAN WESLEYAN METHODIST MISSION, Sanjan, Thana District Headquarters. Stations with missionaries, Danda, Maroli, *via* Nargol, Thana District. Vapi (Daman Road Station), Surat District. Pardi 6, Surat District. Six missionaries on field. Two on furlough. One under appointment. Four main stations. Two boarding schools. One industrial school. One Bible school. Six village schools. *Superintendent:* C.B. Harvey, Sanjan, Thana District.

THE REFORMED EPISCOPAL CHURCH OF AMERICA at Latipur and Lucknow, U. P., has 2 Missionaries, 4 Outstations, 1 Hospital, 2 Orphanages and a membership of nearly 100.

The Methodist Protestant Mission began work in India in 1919, has a staff of seven missionaries, and one under appointment. The work is confined to Dhulia Taluka, with one Main station, Dhulia. There two boarding schools, district evangelistic work and medical work. *Secretary:* Miss Mildred Miskimen, Dhulia, West Khandesh.

THE WESLEYAN METHODIST MISSIONARY SOCIETY commenced work in India in 1817 (Ceylon in 1814). The Mission in India, apart from Ceylon, is organised into 7 District Synods with 2 Provincial Synods. There is a large English work connected with the Society, 20 ministers giving their whole time to Military work and English churches.

The districts occupied include 68 main stations in Bengal, Madras, Mysore, Bombay, Punjab, Central Provinces, Hyderabad (Nizam's Dominions), United Provinces and Burma. The Burma Synod has recently been attached to the Ceylon Provincial Synod for purposes of administration. Its statistics are no longer included in this statement. The European staff numbers 102 with 75 Indian Ministers and 791 Indian workers; Communicants 18,513, and total Christian community 101,245. There are 7 large numbers of organised Churches many of which are self-supporting.

Educational work comprises 3 Christian Colleges, students, 2,033; 5 Theological Institutions, students, 329; 7 High Schools, pupils, 3,427; 14 Industrial schools, pupils, 400; 923 Elementary schools, with 26,180 scholars. In Medical work there are 3 hospitals, 12 dispensaries, 1,127 in-patients and 65,431 out-patients.

The Women's Auxiliary carry on an extensive work in the places occupied by the W. M. M. S. There are 93 women workers from abroad of whom 16 are qualified doctors. The Indian women workers number 382. There are 109 girls' day schools with 13,377 pupils and 28 boarding schools with 1,979 boarders. There are several philanthropic institutions for the rescue and training of women. The Women's Auxiliary manage 12 hospitals and 9 dispensaries, which had 8,041 in-patients and 97,533 out-patients. The cost of the work to the Women's Auxiliary in 1925 was nearly £ 25,000.

THE FREE METHODIST MISSION of North America—Established at Yeotmal, 1893, operates in Berar with a staff of 17 Missionaries and 45 Indian workers. Organised churches 4, 1 Theological school and 9 Elementary schools, and 2 Anglo-Vernacular schools and Dispensaries 3. *Secretary*: Rev. Elizabeth Moreland, Yeotmal, Berar.

THE SALVATION ARMY.

For many years the operations of the Salvation Army in India were under the immediate direction of eight Territorial Commanders, in part responsible to Commissioner Booth-Tucker, as Special Commissioner for India, and in part to International Headquarters. The General recently decided to divide the country into four distinct Commands, each under its own Territorial Commissioner and directly responsible to International Headquarters.

Northern India.—The area under this command is the S. A. work in the whole of the Punjab and the United Provinces with Headquarters at Lahore.

In addition to an extensive evangelistic work in the Punjab, and in several centres in the United Provinces, there are a number of Settlements for the Criminal Tribes in the United Provinces (where this important work was first introduced) and several also in the Punjab.

In the Punjab is situated an agricultural settlement consisting of a large village of 1,800 inhabitants who cultivate some 2,000 acres of land, in which they will gradually acquire proprietary rights, the Government having given it to the Salvation Army on easy terms. This is proving to be very successful.

The oversight of a large tract of country in the Punjab, comprising some two thousand acres of land, has been handed to the Salvation Army, for the purpose of establishing a Colony.

Other institutions include Weaving Schools Agricultural, and Fruit Farms, Day and Boarding Schools, a Home for stranded Europeans, and for British Military Soldiers, 2 Hospitals and 4 Dispensaries.

Village Centres occupied, 1,783 ; Officers and Employees, 586 ; Social Institutions, 23.

Territorial Headquarters : S. A., Ferozepore Road, Lahore, Punjab.

Territorial Commander : Colonel Himmat Singh (Baugh).

Chief Secretary : Lt.-Colonel Dileri Singh (Melling).

Western India.—The three Territories of Bombay, Guzerat, and Maratha now form the Territory of Western India.

Besides the distinctly evangelistic operations, there are established a large General Hospital—Thomas Emery Memorial—several Dispensaries, at which during the year about 14,300 patients are treated, over 224 Day and Boarding Schools, a Home for Juvenile Criminals, an Industrial and Rescue Home for Women, conditionally Released Prisoners' Home Weaving Schools; a Factory for Weaving, Warping, and Reeling Machines, and a Land Colony having a population of some hundreds of Salvationists.

Corps, 315 ; Outposts, 475 ; Officers, 623, of whom 552 are Indian ; employees and teachers, 91 ; Social Institutions, 15.

Territorial Headquarters : S. A., Morland, Road, Byculla, Bombay.

Territorial Commander : Lieut. Commissioner Ewens.

Madras and Telugu Territory.—This Territory comprises the city of Madras and work situated in the Nellore, Guntur, Kistna and West Godaveri Districts of the Northern Circars of the Madras Presidency, also Bangalore.

There are the following agencies at work :—257 Corps and outposts, *viz.*, places in which work is systematically done.

112 Village Primary Schools, 4 Settlements for Criminal Tribes with a total population of 3,588. 2 Industrial Schools for children of Criminal Tribes. 1 Rescue Home. 1 Silk Farm, where some 60 boys are being instructed in the various branches of sericulture, 2 institutions for the training of officers and 1 boarding schools for boys and 1 for girls.

1 Trading Department, where cloth, leather goods, furniture, carpets, silk, lace, etc. the products of Industrial Institutions, are disposed of.

Territorial Headquarters : The Salvation Army, Broadway, Madras.

Territorial Commander : Colonel N. Muthiah.

Chief Secretary : Major E. Maslin.

The South Indian Territory of the Salvation Army is operating in the Native States of Travancore and Cochin and in the Tinnevelly District of British India.

They are working amongst six castes, and calls have been received from other castes, amongst whom they have not yet been able to commence operations. Even among the six castes, there are districts from which the people are calling us which they are not able to meet yet. Work is carried on in 1,228 villages, there are 1,230 Officers and Teachers and 298 Day Schools.

There have been advances in every department of the work, in addition to the erection of a number of Village Halls and Officers' Quarters, three Central Halls have been completed and two others are in course of erection. A new Training Garrison for the Men Cadets of the Malayalam area of the Territory, is being erected in Trivandrum. A Divisional Headquarters has also been erected for Kalkulam Division in Thucklai, and a second reconstructed at Kottarakara.

Futher improvements have been made in the Medical Department, and since the return of the Senior Medical Officer, much work has been done towards the same. The new Eye Ward and Women's Block are rapidly nearing completion and a Cholera Isolation Ward and Septic tank system are also being planned, at the Catherine Booth Hospital at Nagercoil. Of the Branches, a new Inpatients' Block is being constructed at Chembanvillai, whilst the Old Hospital from Muttackadu has been removed and reconstructed at Kothanallur. There are two schemes under consideration for work among the Lepers ; one in the Cochin State and the other in North Taravancore.

There are 78 Boys and 30 Girls in the three Boarding Schools, at Nagercoil and Trivandrum.

The children attend the Vernacular and English Schools.

Industrial Departments, though the market for certain branches of the work are very slack, are maintaining their position and also doing good work amongst the women whom they employ.

Territorial Headquarters : The Salvation Army, Kuravanconam, Trivandrum.

Territorial Commander : Colonel (Mrs.) A Trounce.

Chief Secretary :—Lieut.-Colonel Yesu Dasen.

Laws and the Administration of Justice.

The indigenous law of India is personal and divisible with reference to the two great classes of the population, Hindu and Mahomedan. Both systems claim divine origin and are inextricably interwoven with religion, and each exists in combination with a law based on custom. At first the tendency of the English was to make their law public and territorial, and on the establishment of the Supreme Court at Calcutta in 1773 and the advent of English lawyers as judges, they proceeded to apply it to Europeans and Indians alike. This error was rectified by the Declaratory Act of 1780, by which Parliament declared that as against a Hindu the Hindu law and usage, and as against a Mahomedan the laws and customs of Islam should be applied. The rules of the Shastras and the Koran have been in some cases altered and relaxed. Instances can be found in the Bengal Sati Regulation Act of 1829; the Indian Slavery Act, 1843; the Caste Disabilities Removal Act of 1850; the Hindu Widows' Remarriage Act, 1856; and other Acts and Codes. To quote the Imperial Gazetteer, "A certain number of the older English statutes and the English common law are to a limited extent still in force in the Presidency Towns as applicable to Europeans, while much of the old Hindu and Mahomedan law is everywhere personal to their native fellow subjects; but apart from these, and from the customary law, which is as far as possible recognised by the Courts, the law of British India is the creation of statutory enactments made for it either at Westminster or by the authorities in India to whom the necessary law-giving functions have from time to time been delegated."

Codification.

Before the transfer of India to the Crown the law was in a state of great confusion. Sir Henry Cunningham described it as "hopelessly unwieldy, entangled and confusing." The first steps toward general codification were taken in 1833, when a Commission was appointed, of which Lord Macaulay was the moving spirit, to prepare a penal code. Twenty-two years elapsed before it became law, during which period it underwent revision from his successors in the Law Membership, and especially by Sir Barnes Peacock, the last Chief Justice of the Supreme Court of Calcutta. The Penal Code, which became law in 1860, was followed in 1861 by a Code of Criminal Procedure. Substantially the whole criminal law of British India is contained in these two Codes. One of the most eminent lawyers who ever came to India, Sir James Stephen, said "The Indian penal code may be described as the criminal law of England freed from all technicalities and superfluities, systematically arranged and modified in some few particulars (they are surprisingly few) to suit the circumstances of British India. It is practically impossible to misunderstand the code." The rules of Civil Procedure have been embodied in the Code of Civil Procedure. The Indian Penal Code has from time to time been amended. The Code of Civil Procedure was remodelled in 1908 and the Code of Criminal Procedure in 1898. These Codes are now in force.

Statute Law Revision.

In October, 1921, a committee was appointed under the presidency of the Hon. Mr. A. P. Muddiman, I.C.S., to deal with the question of statute law revision. The functions of the Committee are to prepare for the consideration of Government such measures of consolidation and clarification, as may be necessary to secure the highest attainable standard of formal perfection in the statute law of India. In several branches of the law consolidation has long been overdue, and it is suggested that the preparation of a Bill consolidating the existing law relating to merchant shipping, with such amendments therein as are necessitated or rendered desirable by the enactment of the English statutes since 1894 on the same subject should form the first duty undertaken by the Committee. Under the conditions resulting from the establishment of the reformed Constitution, increasing importance will attach hereafter to the periodical examination and revision of the Statute Book and the Government of India hope that the Committee will take its place as a permanent feature of the legislative machinery of the country.

European British Subjects.

Whilst the substantive criminal law is the same for all classes, certain distinctions of procedure have always been maintained in regard to criminal charges against European British subjects. Until 1872 European British subjects could only be tried or punished by one of the High Courts. It was then enacted that European British subjects should be liable to be tried for any offences by magistrates of the highest class, who were also justices of the peace, and by judges of the Sessions Courts; but it was necessary in both cases that the magistrate or judge should himself be a European British subject. In 1883 the Government of India announced that they had decided "to settle the question of jurisdiction over European subjects in such a way as to remove from the code at once and completely every judicial disqualification which is based merely on race distinctions." This decision, embodied in the Ilbert Bill, aroused a storm of indignation which is still remembered. The controversy ended in a compromise which is thus summarised by Sir John Strachey ("India"). "The controversy ended with the virtual, though not avowed, abandonment of the measure proposed by the Government. Act III of 1884, by which the law previously in force was amended, cannot be said to have diminished the privileges of European British subjects charged with offences, and it left their position as exceptional as before. The general disqualification of native judges and magistrates remains; but if a native of India be appointed to the post of district magistrate or sessions judge, his powers in regard to jurisdiction over European British subjects are the same as those of an Englishman holding the same office. This provision however is subject to the condition that every European British subject brought for trial before the district magistrate or sessions judge has the right, however trivial be the charge, to claim to be tried by a jury of which

not less than half the number shall be Europeans or; Americans......Whilst this change was made in the powers of district magistrates, the law in regard to other magistrates remained unaltered." Since 1836 no distinctions of race have been recognised in the civil courts throughout India.

After a discussion on this subject in the Legislative Assembly in September 1921, the following motion was adopted:—"That in order to remove all racial distinctions between Indians and Europeans in the matter of their trial and punishment for offences, a committee be appointed to consider what amendments should be made in the provisions of the Code of Criminal Procedure, 1898, which differentiate between Indians and European British subjects and American and Europeans who are not British subjects in criminal trials and proceedings and to report on the best methods of giving effect to their proposals." As a result of the recommendations of the Racial Distinctions Committee the law on the subject was further modified, and by the Criminal Law Amendment Act XII of 1923 in place of the old Chapter XXXIII (55443-463) the new Chapter XXXIII (55443-449) with certain supplementary provisions were substituted. This has in some measure reduced the differences between the trials of Europeans and of Indians under the Code.

High Courts.

The highest legal tribunals in India are the High Courts of Judicature. These were constituted by the Indian High Courts Act of 1861 for Bengal, Bombay and Madras, and later for the United Provinces and the Punjab superseding the old supreme and Sudder Courts. More recently High Courts have been constituted for Patna and Rangoon as well. The Judges are appointed by the Crown; they hold office during the pleasure of the Sovereign; at least one-third of their number are barristers, one-third are recruited from the judicial branch of the Indian Civil Service, the remaining places being available for the appointment of Indian lawyers. Trial by jury is the rule in original criminal cases before the High Courts, but juries are never employed in civil suits in India.

For other parts of India High Courts have been formed under other names. The chief difference being that they derive their authority from the Government of India, not from Parliament. In Burma there is a Chief Court, with three or more judges; in the other provinces the chief appellate authority is an officer called the Judicial Commissioner. In Sind the Judicial Commissioner is termed Judge of the Sudder Court and has two colleagues.

The High Courts are the Courts of appeal from the superior courts in the districts, criminal and civil, and their decisions are final, except in cases in which an appeal lies to His Majesty in Council and is heard by the Judicial Committee of the Privy Council in England. The High Courts exercise supervision over all the subordinate courts. Returns are regularly sent to them at short intervals and the High Courts are able, by examining the returns, by sending for proceedings, and by calling for explanations, as well as from the cases that come before them in appeal, to keep themselves to some extent acquainted with the manner in which the courts generally are discharging their duties.

Lower Courts.

The Code of Criminal Procedure provides for the constitution of inferior criminal court-styled courts of session and courts of magistrates. Every province, outside the Presidency towns, is divided into sessions divisions consisting of one or more districts. and every sessions division has a court of session and a sessions judge, with assistance if need be. These stationary sessions courts take the place of the English Assizes, and are competent to try all accused persons duly committed, and to inflict any punishment authorised by law, but sentences of death are subject to confirmation by the highest court of criminal appeal in the province. Magistrates' courts are of three classes with descending powers. Provision is made and largely utilised in the towns, for the appointment of honorary magistrates; in the Presidency towns Presidency magistrates deal with magisterial cases and benches of Justices of the Peace or honorary magistrates dispose of the less important cases.

Trials before courts of session are either with assessors or juries. Assessors assist, but do not bind the judge by their opinions; on juries the opinion of the majority prevails if accepted by the presiding Judge. The Indian law allows considerable latitude of appeal. The prerogative of mercy is exercised by the Governor-General-in-Council and the Local Government concerned without prejudice to the superior power of the Crown.

The constitution and jurisdiction of the inferior civil courts varies. Broadly speaking one district and sessions judge is appointed for each district: as District Judge he presides in its principal civil court of original jurisdiction; his functions as Sessions Judge have been described. For these posts members of the Indian Civil Service are mainly selected though some appointments are made from the Provincial Service. Next come the Subordinate Judges and Munsiffs, the extent of whose original jurisdiction varies in different parts of India. The civil courts, below the grade of District Judge, are almost invariably presided over by Indians. There are in addition a number of Courts of Small Causes, with jurisdiction to try money suits up to Rs. 500. In the Presidency Towns, where the Chartered High Courts have original jurisdiction, Small Cause Courts dispose of money suits up to Rs. 2,000. As Insolvency Courts the chartered High Courts of Calcutta, Bombay and Madras have jurisdiction in the Presidency towns. In the mofussil similar powers were conferred on the District Courts by the Insolvency Act of 1906.

Coroners are appointed only for the Presidency Towns of Calcutta and Bombay. Elsewhere their duties are discharged by the ordinary staff of magistrates and police officers unaided by jurors.

Legal Practitioners.

Legal practitioners in India are divided into Barristers-at-Law, Advocates of the High Court; Vakils and Attorneys (Solicitors) of High Courts,

and Pleaders, Mukhtiars and revenue agents. Barristers and Advocates are admitted by each High Court to practise in it and its subordinate courts; and they alone are admitted to practise on the original side of some of the chartered High Courts. Vakils are persons duly qualified who are admitted to practise on the appellate side of the chartered High Courts and in the Courts subordinate to the High Courts. Attorneys are required to qualify before admission to practise in much the same way as in England. The rule that a solicitor must instruct counsel prevails only on the original side of certain of the High Courts. Pleaders practise in the subordinate courts in accordance with rules framed by the High Courts.

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Bengal Judicial Department.

Name	Office
Rankin, The Hon. Sir George Claus, Kt., K.C., Bar-at-Law.	Chief Justice.
Ghosh, The Hon. Mr. Justice Charu Chunder, Kt., Bar-at-Law.	Puisne Judge
Buckland, The Hon'ble Mr. Justice Philip Lindsay, Kt., Bar-at-Law.	Ditto.
Suhrawardy, The Hon'ble Mr. Justice Zahhadur Rahim Bar-at-Law.	Ditto.
Cuming, The Hon Mr. Justice Arthur Herbert, Kt., I.C.S.	Ditto.
Pearson, The Hon'ble Mr. Justice Herbert Grayhurst, Zahid, Bar-at-Law.	Ditto.
Ghosh, The Hon'ble Mr. Justice Bepin Behari, M.A., B.L.	Ditto.
Panton, The Hon'ble Mr. Justice Edward Brooks Henderson, I.C.S.	Ditto.
Page, The Hon'ble Mr. Justice Arthur, K.C., Bar-at-Law .	Ditto. (On leave.)
Chotzner, The Hon'ble Mr. Justice Alfred James, I.C.S. .	Ditto.
Duval, The Hon'ble Mr. Justice Herbert Philip, M.A., LL.M., C.I.E., I.C.S., Bar-at-Law.	Ditto.
Mukharji, The Hon. Mr. Justice Manmatha Nath, M.A., B.L.	Ditto.
Costello, The Hon'ble Mr. Justice Leonard Wilfred James, M.A., LL.B., Bar-at-Law.	Ditto.
Graham, The Hon'ble Mr. Justice John Fuller, I.C.S. ..	Ditto.
Lart-Williams, The Hon'ble Mr. Justice John, K.C., Bar-at-Law.	Ditto.
Malik, The Hon'ble Mr. Justice Satyendra Chandra, I.C.S	Ditto.
Mitter, The Hon'ble Mr. Justice Dwarkanath, M.A., D.L. .	Ditto. (Additional.)
Vacant	Advocate-General.
Panckridge, H. R., Bar-at-Law	Standing Counsel.
Basu, A. K., Bar-at-Law	Government Counsel.
Gooding, G. C.	Government Solicitor and Public Prosecutor in the High Court.
Ghosh, M. C., I.C.S.	Superintendent and Remembrancer of Legal Affairs and Judicial Secretary to Government.
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Sadhu, Rai Bahadur Tarak Nath, C.I.E.	Public Prosecutor in the Courts of the Presidency Magistrates in Calcutta.
Remfry, Maurice	Registrar.
Ghatak, N., M.B.E., Bar-at-Law	Master and Official Referee.
Mitra, Satish Chandra	Registrar in Insolvency.
D'Abrew, P. A.	Secretary to the Chief Justice and Head Clerk, Decree Department.
Moses, O., Bar-at-Law	Clerk of the Crown for Criminal Sessions.
Stork, H. C., I.C.S.	Registrar and Taxing Officer, Appellate Jurisdiction.
Counsell, Frank Bertram	Deputy Registrar.
Kinney, Alexander	Administrator-General and Official Trustee.
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Kemp, The Hon'ble Mr. Justice Norman Wright, Bar.-at-Law.	Ditto.
Madgaonkar, The Hon'ble Mr. Justice Govind Dinanath, B.A., I.C.S.	Ditto. (On leave.)
Mirza, Ali Akbar Khan, The Hon'ble Mr. Justice Bar-at-Law.	Ditto.
Blackwell, The Hon'ble Mr. Justice Cecil Patrick, Bar-at-Law.	Ditto. (On leave.)
Patkar, The Hon. Mr. Justice Sitaram Sundarrao, B.A., LLB.	Ditto.
Baker, The Hon. Mr. Justice W. T. W., B.A. (Oxon.), I.C.S.	Ditto. (Officiating.)
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Kemp, The Hon'ble Mr. Justice Norman Wright, Bar.-at-Law.	Ditto.
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Patkar, The Hon. Mr. Justice Sitaram Sundarrao, B.A., LLB.	Ditto.
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Bombay Judicial Department—*contd.*

Name	Office
Murphy, The Hon'ble Mr. Justice Stephen James, I.C.S.	Puisne Judge (Officiating.)
Kemp, The Hon. Mr. Justice K. McI., Bar-at-Law.	Ditto. ,,
Rangnekar, The Hon'ble Mr. Sajba Shanker, B.A.,LL.B. Bar-at-Law.	Ditto. (Offg. Additional.)
Kanga, Jamshedji Behramji, M.LL., B.	Advocate-General.
Balak Ram, I.C.S.	Remembrancer of Legal Affairs.
Kirke-Smith, A.	Government Solicitor and Public-Prosecutor.
Vakil, J. H., Bar-at-Law	Clerk of the Crown.
Kemp, K. Mac I., Bar.-at-Law	Reporter to the High Court.
Mitchell, H. C. B...	Administrator-General and Official Trustee and Registrar of Companies.
Phirozshah Behramji Malbari, Bar.-at-Law	Prothonotary, Testamentary and Admiralty Registrar.
Hirjibhai Hormasji Wadia, M.A.	Master and Registrar in Equity and Commissioner for taking Accounts and Local Investigations, and Taxing Officer.
Nassarwanji Dinshahji Gharda, B.A., LL.B.	Deputy Registrar and Sealer, Appellate Side, and Secretary to Rule Committee, Acting Registrar, Appellate Side. (On leave).

Court of the Judicial Commissioner of Sind.

Name	Office
Percival, Philip Edward, C.I.E., B.A., I.C.S.	Judicial Commissioner (on leave.)
Wild, A. C., B.A., I.C.S.	Ditto. (Offg.)
Aston, Arthur Henry Southcote, M.A., Bar-at-Law ..	Additional Judicial Commissioner.
Rupchand Bilaram	Ditto.
DeSouza, Dr. F. X., M.A., LL.B., I.C.S., Bar-at-Law ..	Ditto. (On leave.)
Milne, R. B., M.A., I.C.S.	Ditto. (Offg.)

Madras Judicial Department.

Name	Office
Trotter, The Hon'ble Sir Victor Murray Coutts, Kt., M.A., (Oxon.), Bar-at-Law.	Chief Justice.
Spencer, The Hon'ble Sir Charles Gordon, I.C.S., Bar-at-Law.	Judge. (On leave.)
Phillips, The Hon'ble Mr. William Watkin, I.C.S. ..	Ditto.
Kumaraswami Sastri, The Hon'ble Sir C. V., Diwan Bahadur, B.A., B.L.	Ditto.
Ramesam, The Hon'ble Mr. V.	Ditto.
Odgers, The Hon'ble Mr. Charles Edwin, M.A., B.C.L., Bar-at-Law.	Ditto.
Devadoss, The Hon'ble Mr. M.D., Bar-at-Law	Ditto.
Venkatasubba Rao, The Hon'ble Mr. M., B.A., B.L. ..	Ditto.
Wallace, The Hon'ble Mr. E. H., I.C.S.	Ditto. (On leave.)
Beasley, The Hon'ble Mr. H. O. C.	Ditto.
Waller, The Hon'ble Mr. D. G., I.C.S.	Ditto. (On leave.)
Madhavan Nair, The Hon'ble Mr. C., Bar-at-Law ..	Ditto.
Tiruvenkata Achariyar, C. R., Diwan Bahadur	Ditto. (Temporary.)
Jackson, The Hon'ble Mr. G. H. B., I.C.S.	Ditto. (On leave.)
Cornish, The Hon'ble Mr. H. D.	Administrator-General.
Rappell, A. C., I.C.S.	Registrar.
Ananthakrishna Ayyar, C. V., B.A., B.L.	Advocate-General.
Moresby, Charles	Government Solicitor.
Bowes, L. H.	Public Prosecutor.
Madhava Menon, K. P., Bar-at-Law	Public Prosecutor and Crown Prosecutor.
Tirunarayana Achariyar, M.A., Advocate	Editor, Indian Law Reports, Madras Series.
Ramchandra Ayyar, K.	Law Reporter.
Rajagopala Achariyar, N.	Ditto.
Sankaranarayana, B. C., M.A., LL.B., Bar-at-Law ..	Ditto.

Assam Judicial Department.

Name	Office
Patterson, Davis Clarke	District and Sessions Judge, Assam Valley Districts.
Rau, B. N.	Secretary to Government, Legislative Department, and Secretary to the Assam Legislative Council. Superintendent and Remembrancer of Legal Affairs. Administrator-General and Official Trustee.

Assam Judicial Department—*contd.*

Name	Office
Edgley, Norman George Armstrong	District and Session Judge, Sylhet and Cachar.
Blank, Abraham Lewis	Officiating District and Sessions Judge, Assam Valley Districts. (Temporary.)
Lahiri, Narendra Nath	Addition al District and Sessions Judge, Sylhet and Cachar.
Basu, Pashupati	2nd Additional District and Sessions Judge, Sylhet.
Das, Mohendra Nath	3rd Additional District and Sessions Judge, Sylhet.

Bihar and Orissa Judicial Department.

Name	Office
Terral, The Hon'ble Mr. Courtney	Chief Justice.
Mullick, The Hon'ble Sir Basanta Kumar, Kt., I.C.S.	Puisne Judge. (On deputation.)
Jwala Prashad, The Hon'ble Sir, Kt., Rai Bahadur	Ditto.
Prafulla Ranjan Das, The Hon. Mr. Justice, Bar-at-Law.	Ditto.
Adami, The Hon. Mr. Justice Leonard Christian, I.C.S.	Ditto.
Ross, The Hon'ble Mr. Justice Robert Lindsay, I.C.S.	Ditto.
Wort, The Hon'ble Mr. Justice Alfred William Ewart, Bar-at-Law.	Ditto.
Sahay, The Hon'ble Mr. Justice Kulwant	Ditto.
Macpherson, The Hon'ble Mr. Justice Thomas Stewart, C.I.E., I.C.S., Bar-at-Law.	Ditto.
Fazl Ali, The Hon. Mr. Justice Saiyid, Bar-at-Law	Ditto.
Williams, H. W., I.C.S.	Registrar.
Saiyid Sultan Ahmed, Sir, Kt., Bar-at-Law	Government Advocate.

Burma Judicial Department.

Name	Office
Rutledge, The Hon'ble Sir John Guy, Kt., K.C., M.A., Bar-at-Law.	Chief Justice, Rangoon.
Pratt, The Hon'ble Mr. Justice Henry Sheldon, M.A., I.C.S.	Judge, Mandalay.
Heald, The Hon'ble Sir Benjamin Herbert, Kt., M.A., I.C.S., V.D.	Do. Rangoon.
Carr, The Hon'ble Mr. Justice William, I.C.S.	Do. do.
Cunliffe, The Hon'ble Mr. Justice John Robert Ellis, Bar-at-Law.	Do. do.
Chari, The Hon'ble Mr. Justice Parungavur Narasimha, B.L.	Do. do.
Das, The Hon'ble Mr. Justice Jyotis Ranjan, Bar-at-Law.	Do. do.
Otter, The Hon'ble Mr. Justice Robert Edward, M.C., Bar-at-Law.	Do. do.
Ba, The Hon'ble Mr. Justice Maung, K.S.M., B.A.	Do. do.
Bu, The Hon'ble Mr. Justice Mya, Bar-at-Law	Do. do.
Brown, The Hon'ble Mr. Justice Harold Arrowsmith, B.A., I.C.S., Bar-at-Law.	Do. do.
Hormasji Jivanji, M.A., I.S.O., LL.B., Bar-at-Law	Administrator-General, Official Trustee. Official Assignee and Receiver, Rangoon.
Eggar, A., M.A., Bar-at-Law	Government Advocate.
Barretto, Charles Lionel, Advocate	Government Prosecutor, Moulmein.
Dunkley, Herbert Francis, M.A., Bar-at-Law.	Registrar, High Court, Rangoon.

Central Provinces Judicial Department.

Name	Office
Findlay, Charles Stewart, M.A., LL.B., I.C.S.	Judicial Commissioner.
Hallifax, H. F., I.C.S.	Additional Judicial Commissioner (on leave).
Prideaux, F. W. A., O.B.E.	Do. do.
Kinkhede, Rao Bahadur Madhorao, B.A., B.L.	Do. do. (Officiating).
Ghulam Mohiuddin, K. B., M.A., LL.B., Bar-at Law	Additional Judicial Commissioner (Tempy.)
Staples, Francis Hammond, M.A., I.C.S.	Do. (Officiating.)
Grille, F. L., Bar-at-Law, I.C.S.	Legal Remembrancer.
Dick, George Paris, C.I.E., Bar-at-Law	Government Advocate.
Bhagade, Shridhar Madho, B.A., B.L.	Registrar.
Borwanker, Keshoo Raghunath, B.A., LL.B.	Deputy Registrar.

N.-W. Frontier Province Judicial Department.

Fraser, J. H. R., O.B.E.	Officiating Judicial Commissioner.
Saadud Din Khan, K. B., B.A., LL.B.	Additional Judicial Commissioner.
Gul Muhammad Khan, M., B.A.	Registrar.

Punjab Judicial Department.

Shadi Lal, The Hon'ble Sir R. B., Kt., Bar-at-Law ..	Chief Justice.
Broadway, The Hon. Mr. Justice Alan Brice, Bar-at-Law.	Puisne Judge (on leave)
Harrison, The Hon. Mr. Justice Michael Harman, I.C.S.	Puisne Judge.
Fforde, The Hon'ble Mr. Justice Cecil (King's Counsel).	Ditto.
Zafar Ali, The Hon'ble Mr. Justice K. B. Mirza, I.C.S. ..	Ditto.
Addison, The Hon'ble Mr. Justice James, M.A., B.SC.,I.C.S.	Ditto.
Tek Chand, The Hon'ble Mr. Justice Bakhshi	Ditto.
Jai Lal, The Hon'ble Mr. Justice R. B.	Additional ditto.
Dalip Singh, The Hon'ble Mr. Justice Kanwar, Bar-at-Law.	Ditto.
Coldstream, The Honble Mr. Justice John, I.C.S. ..	Ditto.
Agha Haider, The Hon'ble Mr. Justice Syed, Bar-at-Law (Temporary.)	Ditto.
Skemp, The Hon'ble Mr. Justice F.W.	Offg. Judge.
Bhide, The Hon'ble Mr. Justice Mahadeva Vishnu, B.A., (Cantab.), I.C.S.	Temporary Judge.
Johnstone, The Hon'ble Mr. Justice D., I.C.S.	Acting Judge.
Beckett, Ronand Baymer, B.A., I.C.S.	Registrar.
Roblin, Edward Lewis	Deputy Registrar.
Nihal Chand, Rai Sahib, Lala	Assistant Registrar.
Webb, Kenneth Cameron	Assistant Deputy Registrar.
Currie, Mark Mainwaring Lee, I.C.S.	Legal Remembrancer.
Noad, Charles Humphrey Carden, B.A., Bar-at-Law ..	Government Advocate.
Ram Lal Diwan, B.A. (Oxon.), Bar-at-Law	Assistant Legal Remembrancer. (Conveyancing.)
Abdul Rashid Mian, B.A. (Punjab), M. B. (Cantab.) ..	Assistant Legal Remembrancer. (Legislative.)

United Provinces Judicial Department.

Mears, The Hon. Sir Edward Grimwood, Bar-at-Law ..	Chief Justice.
Young, The Hon'ble Mr. J. D., ...	Puisne Judge.
Sulaiman, The Hon. Justice Dr. Shah Muhammad, Bar-at-Law.	Ditto.
Lindsay, The Hon. Mr. Benjamin, I.C.S.	Ditto (on leave).
Dalal, The Hon. Mr. Justice Barjor Jamshedji, J. P., Bar-at-Law.	Ditto.
Boys, The Hon. Mr. Justice G. P., Bar-at-Law ..	Ditto.
Mukharji, The Hon. Justice Rai Bahadur Lal Gopal ..	Ditto.
Banarji, The Hon. Justice Rai Bahadur Babu Lalit Mohan.	Ditto.
Ashworth, The Hon. Mr. Justice Ernest Horatio, I.C.S.	Ditto.
Kendall, The Hon'ble Mr. Justice Charles Henry Bayley, J.P., I.C.S.	Additional Puisne Judge.
Sen, The Hon. Justice Dr. Surendra Nath, M.A., LL.D. ..	Do.
J. E. Pedley, I.C.S.	Registrar.
Porter, Wilfred King, Bar-at-Law	Law Reporter.
Uma Shankar Bajpai, M.A., LL.B.	Government Advocate.

Chief Court of Oudh—Lucknow.

Stuart, The Hon. Sir Louis, Kt., C.I.E., I.C.S.	Chief Judge.
Wazir Hassan, The Hon. Justice Saiyid, B.A., LL.B. ..	Judge.
Gokaran Nath Misra, The Hon. Justice Pandit, M.A., LL.B.	Do.
Muhammad Raza, The Hon. Justice Khan Bahadur Saiyed, B.A., LL.B.	Do.
Kendall, The Hon'ble Mr. Justice Charles Henry Baley, I.C.S.	Do. (Additional Puisne Judge, High Court)
Pullan, Hon. Mr. Justice Ayrton George Popplewell, J.P., I.C.S.	Acting Judge. (On leave.)
Manmatha Nath Upadhya Pandit	Registrar.
Thomas, G. A.	Government Advocate.

NUMBER AND VALUE OF CIVIL SUITS INSTITUTED.

Administrations.	Number of Suits Instituted.							Number of Suits the value of which cannot be estimated in money. (8)	Total Number of Suits Instituted. (9)	Total Value of Suits. (10)
	Value not exceeding Rs. 10. (1)	Value Rs. 10 to Rs. 50. (2)	Value Rs. 50 to Rs. 100. (3)	Value Rs. 100 to Rs. 500. (4)	Value Rs. 500 to Rs.1,000. (5)	Value Rs. 1,000 to Rs.5,000. (6)	Value above Rs.5,000. (7)			Rs.
1. Bengal	92,211	256,865	113,880	122,397	14,208	10,039	2,336	960	612,896	14,01,54,172
2. Bihar and Orissa	38,795	69,961	30,333	37,939	5,501	4,458	967	244	188,198	5,80,51,760
3. United Provinces	8,414	63,716	58,715	84,900	11,892	9,990	2,189	50	239,866	12,05,58,515
4. Punjab	16,441	85,567	83,634	118,782	28,681	11,990	1,821	200	347,116	12,11,00,010
5. Delhi	243	1,673	1,436	2,748	701	680	193	..	7,674	54,59,204
6. North-West Frontier Province ..	2,288	5,553	5,386	7,172	1,431	1,033	280	..	23,148	90,83,567
7. Burma	2,092	18,110	15,060	28,677	5,428	3,687	867	1,778	75,699	3,70,17,907
8. Central Provinces and Berar ..	4,086	30,213	25,487	34,980	5,426	3,925	644	2	104,763	3,21,80,072
9. Assam	3,654	17,275	10,435	8,374	856	500	44	95	41,233	56,50,178
10. Ajmer-Merwara	534	1,957	1,551	1,637	137	91	16	10	5,933	9,53,034
11. Coorg	143	1,188	655	568	39	11	3	32	2,639	2,92,676
12. Madras	83,217	247,884	85,044	127,733	15,789	11,784	1,984	649	574,084	11,07,21,842
13. Bombay	6,815	47,753	39,507	67,772	12,482	8,368	1,374	3,629	(a)187,705	7,02,76,415
14. British Baluchistan	497	1,569	847	857	180	181	59	112	4,302	24,36,134
TOTAL, 1925	259,430	849,294	471,970	644,536	102,751	66,737	12,777	7,761	2,415,256	71,39,35,486
TOTALS 1924	243,786	791,991	423,613	563,777	84,169	60,301	12,245	7,374	(b) 2,187,256	63,56,48,827
1923	232,538	775,769	415,058	541,405	80,846	57,955	11,786	6,551	*2,121,908	67,78,34,777
1922	226,196	799,914	432,905	567,826	86,270	62,467	12,865	5,933	*2,194,376	70,90,84,504
1921	212,499	752,504	424,410	552,240	82,843	60,271	12,621	7,096	*2,104,484	68,50,21,154
1920	242,261	851,941	473,381	584,130	82,914	58,091	12,291	8,992	2,314,001	70,58,35,493
1919	252,766	864,173	460,938	559,434	73,074	52,773	11,589	7,055	*2,282,702	70,02,15,969
1918	266,355	852,754	428,466	492,400	62,886	43,072	8,387	6,091	*2,160,411	60,68,29,956
1917	296,225	919,308	466,612	517,131	61,140	40,880	7,528	6,549	2,315,373	52,80,21,819
1916	305,751	935,140	463,294	511,417	60,405	39,680	7,076	6,237	2,329,000	48,75,42,538

* Details not given of 4 Madras suits in 1918, 6 in 1919, and 21 206 in 1921, and of 6,437 Bombay suits in 1921, 7,104 in 1922, 6,574 in 1923, and 6,014 in 1924.

(a) Excludes 5,628 Suits against "Superior Courts."

(b) Excludes 43 cases transferred to Settlement Courts.

THE INDIAN POLICE.

Origins.—Cornwallis was the first Indian administrator to take the burden of policing the country off the zemindars and to place it on Government. He ordered the District Judges of Bengal in 1793 to open a Thana (Police Station) for every 400 square miles of their jurisdiction, and to appoint stipendiary thanadars (Police Station Officers) and subordinates.

In Madras in 1816 Sir Thomas Munro took superintendence of police out of the hands of the sedentary judges and placed it in the hands of the peripatetic Collector, who had the indigenous village police system already under his control. In this way the Revenue Department controlled the police of the districts and still to some extent does so, especially in Bombay Presidency.

In Khandesh from 1826-36 Outram of Mutiny fame showed how a whole time military commandant could turn incorrigible marauderers into excellent police; and Sir George Clerk, Governor of Bombay in 1848, applied the lesson by appointing full-time European Superintendents of Police in many Districts.

Madras had a torture scandal in 1853 which showed that 3 Collectors had no time for real police superintendence; in 1859 the principle of full-time European superintendence was introduced in a Madras Act of that year and the control of the Collector was removed.

The Mutiny led to general police overhaul and retrenchment and the Madras Act was mainly followed in India Act V of 1861, "An Act for the Regulation of Police", which still governs police working everywhere in India except Madras, and Bombay, which has its own Police Act (IV of 1890).

Working.—Strictly speaking there is no Indian Police. With the doubtful exceptions of the Delhi Imperial Area Police, and the advisory staff of the Intelligence Bureau attached to the Home Department, the Government of India has not a single police officer directly under its control. The police provided for by the 1861 Act is a provincialised police, administered by the Local Government concerned, subject only "to the general control" of the Governor General.

Within the Local Government area the police are enrolled and organised in District forces, at the head of each of which is a District Superintendent of Police with powers of enlistment and dismissal of constabulary; and Police Station Officers may also be dismissed by the D.S.P.

The D. S. P. is subject to dual control. The force he commands is placed at the disposal of the District Magistrate for the enforcement of law and the maintenance of order in the District. But the departmental working and efficiency of the force is governed by a departmental hierarchy of Deputy Inspector-General of Police, Inspector-General of Police, and Home Department. Generally speaking, the D. S. P. has to correspond with his District Magistrate on judicial and magisterial topics, and with his departmental chiefs on internal working of his force.

The C. I. D.—The Curzon Police Commission of 1902-3 modernised police working by providing for the direct enlistment and training of Educated Indians as Police Station Officers, and by creating specialised police agencies under each Local Government for the investigation of specialist and professional crime. These agencies are known as **Criminal Investigation Departments** and work under a Deputy Inspector General. They collate information about crime, edit the *Crime Gazette*, take over from the District Police crimes with ramifications into several jurisdictions, and they control the working of such scientific police developments as the Finger Print Identification Bureaux.

Headquarters and Armed Police.—At the chief town of each District the D. S. P. has his office and also his Headquarter Police Lines and parade ground. This is the main centre for accumulation and distribution to the Police Stations and Outposts of the District of clothing, arms, ammunition, and accoutrements Here are the Stores and the Armoury. Here also constabulary recruits enlisted by the D. S. P. are taught drill, deportment, and duties and are turned out to fill vacancies. The Headquarter Lines also contain the two hundred or so armed police who mount guard on Treasuries in the District, and also provide prisoner and treasure escort. Actually they form a small and mobile local army equipped with muskets (single loading) and bayonets. The most highly trained section of them go through a musketry course and are armed with 303 service rifles. At most head-quarters, but by no means all, there is also a reserve of mounted and armed police.

Thanas and Thanadars.—Almost throughout India the popular terms for Police Station and Police Station Officer are "Thana" and "Thanadar." It is at the Police Station that the public are most in touch with the police and the police with the public. Whether it be in a large city or in a mofussil hamlet the Thana is the place where people come with their troubles and their grievances against their neighbours or against a person or persons unknown. In dealing with such callers, the Thanadar, who like police of all ranks, is supposed to be always on duty, is chiefly guided by the Fourteenth Chapter of the Code of Criminal Procedure, and the Second Schedule at the end of that Code. This schedule shows nearly all penal offences and states whether or not they are "cognisable by the police." The fourteenth Chapter lays down that a cognisable complaint must then and there be recorded, visited, and investigated. A non-cognisable complaint is merely noted in a separate book and the complainant is told to go to court.

Police Prosecutors.—The complaint in a cognisable case not only has his complaint recorded and investigated without payment fee. If the thanadar succeeds in establishing a *prima facie* case against the accused, the prosecution in court is conducted free of charge by a police prosecutor, who is generally a junior pleader, engaged by Government to conduct police cases in the lower courts. Cases committed

to the Sessions are conducted by the Public Prosecutor or one of his Assistants, and the reports of these officers and the comments of the judge are a means for the D. S. P. to know whether his thanadars are doing their work properly.

Out Posts.—When the Police Commission of 1860 devised the plan of police that still holds the field, they laid down two criteria of the numbers required. One was one policeman per square mile: the other was one per thousand of population. In towns it is well enough to have the available police concentrated at the police station. But in the mofussil the thana is very often fifty miles distant from portions of its jurisdiction. It is in such cases profitable to detach a portion of the police station strength under a head constable to man an outpost where complaints can be received and investigation begun without the injured party having to undertake a long journey to the distant thana. The secret of good mofussil police working in normal times is dispersion. A single policeman, however junior, represents the rule of law and is an agent of Government.

The Chain of Promotion.—Ordinarily the constable may aspire to become a jamadar, or with ability and luck, a Police Station Officer or even Inspector. The directly recruited matriculate who comes in through the Police Training School as a Thanadar may ordinarily become an Inspector or a Deputy Superintendent, or exceptionally a Superintendent. The direct Deputy, an office reserved for Indians, has a good chance of becoming Superintendent, and perhaps Deputy-Inspector General. The direct Assistant Superintendent, whether from England, or from India, is sure of a Superintendentship, and has chances of D. I. G. after 25 years' service. The period of service for all ranks for full pension is thirty years, and if an officer dies in the process of earning full pension his pension dies with him and all his dependents get his provident fund.

Presidency Police.—In the Presidency Towns there is unified police control for the Police Commissioner is responsible for both law and order and for departmental training and efficiency.

The Commissioner of Police of a Presidency Town is not the subordinate of the Provincial Inspector-General of Police and he deals direct with Government, just as the Presidency Magistrates deal directly with the High Court. The Criminal Procedure Code of India is superseded in the Presidency Towns by special police Acts which prescribe police procedure. Justice in criminal cases in Presidency Towns is somewhat rough and ready, not only from this cause, but also because Presidency Magistrates can give upto six months or Rs. 200 fine summarily, *i.e.*, without formal record of proceedings; and if only whipping or fine up to Rs. 200 is inflicted there need be not even any statement of reasons for the conviction.

Round Figures.—The process of reorganisation and retrenchment goes on ceaselessly, annual administration reports for the ten major provinces and four minor administrations appeared tardily, and there are no unified statistics for the police of India and Burma. The following figures are therefore merely to be regarded as approximations, giving a general idea of the numbers of police and the volume of work put through yearly:—There are about 30,000 Military Police, chiefly in Burma, Assam, and Bengal, and these cost about one and a third crores. The maintenance of them is a departure from the principles laid down by the 1860 Commission and the 1861 Act.

Provincial Police including Burma total about 200,000 and cost ten and a half crores or an average of about one crore per major Province.

There are about 10,000 Thanas or Police Stations which annually investigate from five to six thousand murders, four thousand dacoities, twenty-five thousand cattle thefts, one hundred and seventy ordinary thefts, and as many burglaries. They place on trial every year about three-quarters of a million persons, of whom about half a million or more are convicted. The jail population of India, which is over a hundred thousand, consists of many habituals who on release proceed to prey on the public until such time as the police again secure their conviction and incarceration.

Statement D (1) "Military Police" for 1923.

Assam Rifles.

Commandants.	Assist. Comm.	Sub. and Jam.	Hav. and Naiks.	Sepoys.	Total.	Cost. Rs.
5	15	77	380	3,420	3,420	1,753,117
	Eastern Frontier Rifles (Bengal Battn).					
1	3	16	70	753	843	415,923
		Bihar and Orissa.				
..	..	12	50	412	472	219,578
		Burma Military Police.				
12	35	321	1,15	11,	13,d52	7,682,261

North West Frontier Constabulary.

Commandant.	Dist. Off.	Assist. D. O.	Sub. and Jam.	Hav. and Naiks.	Sepoys	Total	Cost. Rs.
1	7	6	130	429	4,530	5,675	134,024

Province,	Inspector-Generals and Deputy Inspector Generals.	Superintendents.	Assistant Superintendents of Police.	Deputy Superintendents of Police.	Inspectors.	Sub-Inspectors.	Sergeants.	Head Constables.	Constables.	Total.	Grand Total Cost.	Proportion of Police to area.	Proportion of Police to population.
Assam	1	14	13	9	51	290	2	427	3,563	4,370	2,065,969	1 to 12.2	1 to 1,740.5
Bengal	7	45	52	28	244	1,821	50	2,563	19,360	24,170	13,912,224	1 to 2.9	1 to 1887·2
Bihar	5	29	28	28	187	1,126	17	1,625	11,476	14,523	7,23,864	1 to 5.7	1 to 2,365
Bombay	6	38	31	38	138	753	55	4,774	17,097	22,930	12,066,222	1 to 5.75	1 to 790
Burma ..	6	45	44	50	218	1,392	12	2,985	9,998	14,750	9,968,563	1 to 15.67	1 to 870
C. P.	4	26	10	15	150	738	25	1,719	7,845	10,532	5,635,713	1 to 9	1 to 1,321
Madras	7	33	35	41	302	1,483	155	3,563	23,781	29,400	16,651,269	1 to 4.8	1 to 1,439
N. W. F. ..	1	7	6	13	32	163	1	591	4,656	5,439	2,732,400	1 to 2.4	1 to 413
Punjab	5	36	44	53	131	853	29	2,866	17,212	21,234	10,666,404	1 to 4.9	1 to 1,053
U. P.	6	56	51	56	272	2,080	43	2,600	28,19	33,361	14,245,075	1 to 3.3	1 to 1,420
	48	328	314	333	2,025	9,199	389	23,813	135,19	182,709	95,667,703	1 to 6.66	1 to 1,230

STATISTICS OF POLICE WORK.

The undesirability of attaching undue importance to statistical results as a test of the merits of police work was a point upon which considerable stress was laid by the Indian Police Commission, who referred to the evils likely to result from the prevalence among subordinate officers of an impression that the advancement of an officer would depend upon his being able to show a high ratio of convictions, both to cases and by persons arrested, and a low ratio of crime. The objection applies more particularly to the use of statistics for small areas; but they cannot properly be used as a basis of comparison even for larger areas without taking into account the differences in the conditions under which the police work; and, it may be added, they can at the best indicate only very imperfectly the degree of success with which the police carry out that important branch of their duties, which consists in the prevention of crime. These considerations have been emphasized in recent orders of the Government of India. Subject to these observations, the figures below may be given as some indication of the volume of work falling upon the police, and of the wide differences between the conditions and the statistical results in different provinces. They are statistics of cognizable crime:—

Administrations.	Number of Cases pending from previous Year.	Number of Offences reported.	Number of Persons Tried.	Persons whose Cases were disposed of		Persons in custody pending trial or investigation at end of the year.
				Discharged or Acquitted.	Convicted.	
Bengal	5,160	136,812	158,688	15,167	143,520	9,445
Bihar and Orissa	3,398	45,646	27,913	8,575	19,338	6,223
United Provinces	5,364	116,513	73,408	10,424	62,984	7,452
Punjab	8,358	51,924	50,253	20,009	30,116	10,775
North-West Frontier Province ..	1,667	6,126	7,960	3,761	4,199	1,042
Burma	7,012	81,019	73,417	23,525	49,892	4,833
Central Provinces and Berar ..	2,286	38,030	17,770	4,105	10,988	2,677
Assam	1,153	14,647	10,452	3,254	7,198	2,298
Ajmer-Merwara	348	4,884	3,545	254	3,280	380
Coorg	158	629	650	146	396	106
Madras	13,207	159,360	146,271	17,414	128,857	5,982
Bombay	8,428	135,707	134,158	17,967	116,190	10,000
Baluchistan	66	3,569	3,437	271	3,159	65
Delhi	807	3,911	3,571	1,342	2,229	329
TOTAL, 1926 ..	57,412	8,58,777	711,493	126,215	582,346	61,607
TOTALS .. 1924 ..	54,997	887,747	703,553	130,112	570,729	51,490
1923 ..	56,314	846,664	649,101	124,821	521,861	50,604
1922 ..	59,772	857,234	651,466	127,025	522,002	48,484
1921 ..	56,762	842,948	611,154	124,328	484,401	48,410
1920 ..	61,193	851,087	626,874	119,405	505,108	43,875
1919 ..	57,002	950,706	670,542	124,211	543,758	44,246
1918 ..	44,741	833,405	590,795	107,620	480,663	44,322
1917 ..	43,704	823,950	602,015	104,819	495,282	40,425
1916 ..	42,022	850,624	626,351	110,243	514,630	30,478

PRINCIPAL POLICE OFFENCES.

Administrations.	CASES.													
	Offences against the State and Public Tranquillity.		Murder.		Other serious Offences against the Person.		Dacoity.		Cattle Theft.		Ordinary Theft.		House-trespass and Housebreaking with intent to commit Offence.	
	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.
Bengal	2,378	740	652	33	7,061	1,466	726	71	787	384	23,758	4,596	31,301	2,138
Calcutta Town and Suburbs.	242	112	91	6	655	206	5	4	29	19	3,629	1,381	814	301
Bihar and Orissa ..	1,767	472	347	55	3,771	774	260	25	795	280	15,134	2,843	18,058	1,225
United Provinces ..	2,040	557	947	275	8,091	2,256	759	210	4,647	1,236	21,304	4,701	42,932	4,297
Punjab	2,102	624	699	267	8,323	2,460	182	64	3,585	938	7,903	2,376	19,691	2,800
Delhi	92	8	29	9	199	51	16	5	17	5	647	206	691	105
N.-West Frontier Pro.	195	105	465	252	1,733	760	59	20	140	36	1,031	299	2,323	339
Burma..	1,207	704	1,036	266	11,486	4,212	732	215	5,528	1,812	16,269	5,268	11,592	3,794
Rangoon	40	22	33	10	465	178	17	3	..	..	2,043	665	482	128
Central Provinces and Berar.	582	266	227	96	2,802	945	45	15	965	399	17,258	1,966	11,043	1,305
Assam	975	300	113	19	1,802	465	52	6	323	114	5,374	941	6,007	611
Coorg	5	3	7	4	46	14	..	..	12	2	195	65	75	13
Madras	1,872	673	968	215	6,134	1,538	391	51	4,189	1,468	20,286	5,095	11,912	2,162
Bombay	1,229	396	560	232	5,299	1,516	178	55	2,577	834	11,478	4,494	10,461	2,143
Bombay Town and Island.	63	50	32	16	887	342	2	..	..	..	4,396	1,993	1,456	288
Baluchistan	9	6	6	1	57	22	4	1	1	1	273	99	158	42
Ajmer-Merwara ..	22	10	15	2	175	40	22	1	57	11	1,375	371	615	95
TOTAL, 1926 ..	14,757	5,048	6,227	1,758	58,986	17,295	3,450	746	23,652	7,539	152,353	37,329	169,611	21,786
TOTALS .. 1924.	15,272	5,217	5,899	1,623	56,597	15,465	4,367	874	22,547	6,623	169,195	39,564	190,878	21,809
1923.	14,774	4,913	5,803	1,536	54,113	14,528	4,408	877	21,876	6,433	169,589	37,734	193,112	20,405
1922.	15,051	5,362	5,952	1,519	53,213	14,645	5,355	891	23,481	7,073	181,845	39,745	206,929	21,024
1921.	13,987	5,114	6,063	1,642	50,694	14,382	5,574	953	26,554	8,160	191,641	49,204	221,776	23,346
1920.	11,923	4,375	5,734	1,371	51,298	14,320	4,091	790	27,696	8,692	202,989	49,962	209,522	23,117
1919.	11,518	4,570	5,644	1,457	49,566	14,391	5,824	1,234	31,681	10,433	232,815	59,034	257,118	28,961
1918.	10,946	4,384	5,273	1,427	47,791	13,813	5,299	847	22,283	6,120	195,261	43,297	220,183	21,191
1917.	11,265	4,595	4,861	1,422	50,607	14,910	3,064	506	23,262	6,588	181,056	40,511	210,586	21,379
1916.	11,477	4,676	4,784	1,392	51,629	15,346	3,294	566	26,482	7,558	181,551	41,972	217,979	21,763

JAILS.

Jail administration in India is regulated generally by the Prisons Act of 1894, and by rules issued under it by the Government of India and the local governments. The punishments authorised by the Indian Penal Code for convicted offenders include transportation, penal servitude, rigorous imprisonment (which may include short periods of solitary confinement), and simple imprisonment. Accommodation has also to be provided in the jails for civil and under-trial prisoners.

The origin of all jail improvements in India in recent years was the Jail Commission of 1889. The report of the Commission, which consisted of only two members, both officials serving under the Government of India, is extremely long, and reviews the whole question of jail organization and administration in the minutest detail. In most matters the Commission's recommendations have been accepted and adopted by Local Governments, but in various matters, mainly of a minor character, their proposals have either been rejected *ab initio* as unsuited to local conditions, abandoned as unworkable after careful experiment or accepted in principle but postponed for the present as impossible.

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Province,	Inspector-Generals and Deputy Inspector Generals.	Superintendents.	Assistant Superintendents of Police.	Deputy Superintendents of Police.	Inspectors.	Sub-Inspectors.	Sergeants.	Head Constables.	Constables.	Total.	Grand Total Cost.	Proportion of Police to area.	Proportion of Police to population.
Assam	1	14	13	9	51	290	2	427	3,563	4,370	2,065,969	1 to 12.2	1 to 1,740.5
Bengal	7	45	52	28	244	1,821	50	2,563	19,360	24,170	13,912,224	1 to 2.9	1 to 1887·2
Bihar	5	29	28	28	187	1,126	17	1,625	11,476	14,523	7,23,864	1 to 5.7	1 to 2,365
Bombay	6	38	31	38	138	753	55	4,774	17,097	22,930	12,066,222	1 to 5.75	1 to 790
Burma ..	6	45	44	50	218	1,392	12	2,985	9,998	14,750	9,968,563	1 to 15.67	1 to 870
C. P.	4	26	10	15	150	738	25	1,719	7,845	10,532	5,635,713	1 to 9	1 to 1,321
Madras	7	33	35	41	302	1,483	155	3,563	23,781	29,400	16,651,269	1 to 4.8	1 to 1,439
N. W. F. ..	1	7	6	13	32	163	1	591	4,656	5,439	2,732,400	1 to 2.4	1 to 413
Punjab	5	36	44	53	131	853	29	2,866	17,212	21,234	10,666,404	1 to 4.9	1 to 1,053
U. P.	6	56	51	56	272	2,080	43	2,600	28,19	33,361	14,245,075	1 to 3.3	1 to 1,420
	48	328	314	333	2,025	9,199	389	23,813	135,19	182,709	95,667,703	1 to 6.66	1 to 1,230

STATISTICS OF POLICE WORK.

The undesirability of attaching undue importance to statistical results as a test of the merits or police work was a point upon which considerable stress was laid by the Indian Police Commission, who referred to the evils likely to result from the prevalence among subordinate officers of an impression that the advancement of an officer would depend upon his being able to show a high ratio of convictions, both to cases and by persons arrested, and a low ratio of crime. The objection applies more particularly to the use of statistics for small areas; but they cannot properly be used as a basis of comparison even for larger areas without taking into account the differences in the conditions under which the police work; and, it may be added, they can at the best indicate only very imperfectly the degree of success with which the police carry out that important branch of their duties, which consists in the prevention of crime. These considerations have been emphasized in recent orders of the Government of India. Subject to these observations, the figures below may be given as some indication of the volume of work falling upon the police, and of the wide differences between the conditions and the statistical results in different provinces. They are statistics of cognizable crime:—

Administrations.	Number of Cases pending from previous Year.	Number of Offences reported.	Number of Persons Tried.	Persons whose Cases were disposed of: Discharged or Acquitted.	Persons whose Cases were disposed of: Convicted.	Persons in custody pending trial or investigation at end of the year.
Bengal	5,160	136,812	158,688	15,167	143,520	9,445
Bihar and Orissa	3,398	45,646	27,913	8,575	19,338	6,223
United Provinces	5,364	116,513	73,408	10,424	62,984	7,452
Punjab	8,358	51,924	50,253	20,009	30,116	10,775
North-West Frontier Province ..	1,667	6,126	7,960	3,761	4,199	1,042
Burma	7,012	81,019	73,417	23,525	49,892	4,833
Central Provinces and Berar ..	2,286	38,030	17,770	4,105	10,988	2,677
Assam	1,153	14,647	10,452	3,254	7,198	2,298
Ajmer-Merwara	348	4,884	3,545	254	3,280	380
Coorg	158	629	650	146	396	106
Madras	13,207	159,360	146,271	17,414	128,857	5,982
Bombay	8,428	135,707	134,158	17,967	116,190	10,000
Baluchistan	66	3,569	3,437	271	3,159	65
Delhi	807	3,911	3,571	1,342	2,229	329
TOTAL, 1926 ..	57,412	8,58,777	711,493	126,215	582,346	61,607
TOTALS 1924 ..	54,997	887,747	703,553	130,112	570,729	51,490
TOTALS 1923 ..	56,314	846,664	649,101	124,821	521,861	50,604
TOTALS 1922 ..	59,772	857,234	651,466	127,025	522,002	48,484
TOTALS 1921 ..	56,762	842,948	611,154	124,328	484,401	48,410
TOTALS 1920 ..	61,193	851,087	626,874	119,405	505,108	43,875
TOTALS 1919 ..	57,002	950,706	670,542	124,211	543,758	44,246
TOTALS 1918 ..	44,741	833,405	590,795	107,620	480,663	44,322
TOTALS 1917 ..	43,704	823,950	602,015	104,819	495,282	40,425
TOTALS 1916 ..	42,022	850,624	626,351	110,243	514,630	30,478

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PRINCIPAL POLICE OFFENCES.

Administrations.	CASES. Offences against the State and Public Tranquillity. Reported.	Conviction obtained.	Murder. Reported.	Conviction obtained.	Other serious Offences against the Person. Reported.	Conviction obtained.	Dacoity. Reported.	Conviction obtained.	Cattle Theft. Reported.	Conviction obtained.	Ordinary Theft. Reported.	Conviction obtained.	House-trespass and Housebreaking with intent to commit Offence. Reported.	Conviction obtained.
Bengal	2,378	740	652	33	7,061	1,466	726	71	787	384	23,758	4,596	31,301	2,138
Calcutta Town and Suburbs.	242	112	91	6	655	206	5	4	29	19	3,629	1,381	814	301
Bihar and Orissa ..	1,767	472	347	55	3,771	774	260	25	795	280	15,134	2,843	18,058	1,225
United Provinces ..	2,040	557	947	275	8,091	2,256	759	210	4,647	1,236	21,304	4,701	42,932	4,297
Punjab	2,102	624	699	267	8,323	2,460	182	64	3,585	938	7,903	2,376	19,691	2,800
Delhi	92	8	29	9	199	51	16	5	17	5	647	206	691	105
N.-West Frontier Pro.	195	105	465	252	1,733	760	59	20	140	36	1,031	299	2,323	339
Burma..	1,207	704	1,036	266	11,486	4,212	732	215	5,528	1,812	16,269	5,268	11,592	3,794
Rangoon	40	22	33	10	465	178	17	3	..	..	2,043	665	482	128
Central Provinces and Berar.	582	266	227	96	2,802	945	45	15	965	399	17,258	1,966	11,043	1,305
Assam	975	300	113	19	1,802	465	52	6	323	114	5,374	941	6,007	611
Coorg	5	3	7	4	46	14	..	..	12	2	195	65	75	13
Madras	1,872	673	968	215	6,134	1,538	391	51	4,189	1,468	20,286	5,095	11,912	2,162
Bombay	1,229	396	560	232	5,299	1,516	178	55	2,577	834	11,478	4,494	10,461	2,143
Bombay Town and Island.	63	50	32	16	887	342	2	..	..	..	4,396	1,993	1,456	288
Baluchistan	9	6	6	1	57	22	4	1	1	1	273	99	158	42
Ajmer-Merwara ..	22	10	15	2	175	40	22	1	57	11	1,375	371	615	95
TOTAL, 1926 ..	14,757	5,048	6,227	1,758	58,986	17,295	3,450	746	23,652	7,539	152,353	37,329	169,611	21,786
TOTALS .. 1924.	15,272	5,217	5,899	1,623	56,597	15,465	4,367	874	22,547	6,623	169,195	39,564	190,878	21,809
1923.	14,774	4,913	5,803	1,536	54,113	14,528	4,408	877	21,876	6,433	169,589	37,734	193,112	20,405
1922.	15,051	5,362	5,952	1,519	53,213	14,645	5,355	891	23,481	7,073	181,845	39,745	206,929	21,024
1921.	13,987	5,114	6,063	1,642	50,694	14,382	5,574	953	26,554	8,160	191,641	49,204	221,776	23,346
1920.	11,923	4,375	5,734	1,371	51,298	14,320	4,091	790	27,696	8,692	202,989	49,962	209,522	23,117
1919.	11,518	4,570	5,644	1,457	49,566	14,391	5,824	1,234	31,681	10,433	232,815	59,034	257,118	28,961
1918.	10,946	4,384	5,273	1,427	47,791	13,813	5,299	847	22,283	6,120	195,261	43,297	220,183	21,191
1917.	11,265	4,595	4,861	1,422	50,607	14,910	3,064	506	23,262	6,588	181,056	40,511	210,586	21,379
1916.	11,477	4,676	4,784	1,392	51,629	15,346	3,294	566	26,482	7,558	181,551	41,972	217,979	21,763

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warders and convict warders are employed. With this is bound up the question of a special class of well-behaved prisoners which was tried from 1905 onwards in the Thana Jail.

Juvenile Prisoners.—As regards "youthful offenders"—*i.e.*, those below the age of 15 —the law provides alternatives to imprisonment, and it is strictly enjoined that boys shall not be sent to jail when they can be dealt with otherwise. The alternatives are detention in a reformatory school for a period of from three to seven years, but not beyond the age of 18; discharge after admonition; delivery to the parent or guardian on the latter executing a bond to be responsible for the good behaviour of the culprit; and whipping by way of school discipline.

The question of the treatment of "young adult" prisoners has in recent years received much attention. Under the Prisons Act, prisoners below the age of 18 must be kept separate from older prisoners, but the recognition of the principle that an ordinary jail is not a fitting place for adolescents (other than youthful habituals) who are over 15, and therefore ineligible for admission to the reformatory school, has led Local Governments to consider schemes for going beyond this by treating young adults on the lines followed at Borstal, and considerable progress has been made in this direction. In 1905, a special class for selected juveniles and young adults was established at the Dharwar jail in Bombay; in 1908 a special juvenile jail was opened at Alipore in Bengal; in 1909 the Meiktila jail in Burma and the Tanjore jail in Madras were set aside for adolescents, and a new jail for juvenile and "juvenile adult" convicts was opened at Bareilly in the United Provinces; and in 1910 it was decided to concentrate adolescents in the Punjab at the Lahore District jail, which is now worked on Borstal lines. Other measures had previously been taken in some cases; a special reformatory system for "juvenile adults" had, for example, been in force in two central jails in the Punjab since the early years of the decade, and "Borstal enclosures" had been established in some jails in Bengal. But the public is slow to appreciate that it has a duty towards prisoners, and but little progress has been made in the formation of Prisoners' Aid Societies except in Bombay and Calcutta, though even in those cities much remains to be done.

Reformatory Schools.—These schools have been administered since 1899 by the Education department, and the authorities are directed to improve the industrial education of the inmates, to help the boys to obtain employment on leaving school, and as far as possible to keep a watch on their careers.

Transportation.—Transportation is an old punishment of the British Indian criminal law, and a number of places were formerly appointed for the reception of Indian transported convicts. The only penal settlement at the present time is Port Blair in the Andaman Islands.

Commission of Enquiry, 1919.—A committee was appointed to investigate the whole system of prison administration in India with special reference to recent legislation and experience in Western countries. Its report, published in 1921, was summarised in the Indian Year Book, 1922 (pages 670-671). A number of reforms were advocated but, owing to financial stringency, it has not yet been possible to introduce some of the more important of them.

Fines and Short Sentences.—Those sections of the Indian Penal Code, under which imprisonment must be awarded when a conviction occurs, should be amended so as to give discretion to the court. Sentences of imprisonment for less than twenty-eight days should be prohibited.

The Indeterminate Sentences.—The sentence of every long-term prisoner should be brought under revision, as soon as the prisoner has served half the sentence in the case of the non-habitual, and two-thirds of the sentence in the case of the habitual, remission earned being counted in each case. The revision should be carried out by a Revising Board, composed of the Inspector-General of Prisons, the Sessions Judge and a non-official. In all cases, the release of a prisoner on parole should be made subject to conditions, breach of which would render him liable to be remanded to undergo the full original sentence. The duty of seeing that a prisoner fulfils the conditions on which he was released should not be imposed upon the police or upon the village headman, but special officers, to be termed parole officers, should be appointed for the purpose. These parole officers should possess a good standard of education, though not necessarily a university degree, and should both protect and advise the released prisoner and report breaches of the conditions of release.

Transportation and the Andamans.—If any fresh attempt at colonisation is made, it should be in an entirely new locality. A fresh attempt at colonisation in the Middle Andaman is not recommended. The retention of the settlement at Port Blair on the present lines is not recommended. The entire abandonment of the Andamans as a place of deportation is not recommended. Deportation to the Andamans should cease, except in regard to specially dangerous prisoners and any others whose removal from Indian jails is considered by the Government to be in the public interests. The existing restrictions as to age and physical condition of prisoners sentenced to transportation to the Andamans should, unless special medical grounds exist in any particular case, cease to apply. The Indian Penal Code should be amended by the substitution of rigorous imprisonment for transportation. In provinces where the available prison accommodation will not permit of the immediate cessation of deportation of all but selected prisoners, the Star class should be the first, and the habitual the last, to be detained in Indian jails. No female should in future be deported to the Andamans, and those now there should be brought back to India and distributed among the Provinces to which they belong. In those Provinces where the jails are insufficient to detain prisoners now deported, additional accommodation should be provided as soon as possible.

Criminal Tribes.—The first essential of success in dealing with the criminal tribes is the provision of a reasonable degree of economic

comfort for the people. It is therefore of paramount importance to locate settlements where sufficient work at remunerative rates is available. Large numbers of fresh settlers should never be sent to a settlement without first ascertaining whether there is work for them. Commitment to settlements should, as far as possible, be by gangs not by individuals. It is desirable to utilise both Government and private agency for the control of settlements.

The variations of the jail population in British India during the five years ending 1926 are shown in the following table:—

—	1926.	1925.	1924	1923.	1922.
Jail population of all classes on 1st January	129,753	128,314	126,478	134,286	126,917
Admissions during the year	555,097	536,219	536,428	535,590	639,001
Aggregate	684,850	664,533	662,906	669,876	765,918
Discharged during the year from all causes	552,624	534,779	534,455	543,398	631,628
Jail population on 31st December ..	132,226	129,754	128,451	126,478	134,290
Convict population on 1st January ..	111,395	110,310	109,230	114,817	106,117
Admissions during the year	162,772	158,139	158,466	158,336	185,092
Aggregate	274,167	268,449	267,696	273,153	291,209
Released during the year	157,568	153,997	155,219	161,166	173,313
Transported beyond seas	783	616	571	329	1,514
Casualties, &c.	2,286	2,089	2,340	2,428	3,244
Convict population on 31st December.	113,274	111,395	110,399	109,314	114,817

More than one half of the total number of convicts received in jails during 1926 came from the classes engaged in agriculture and cattle tending, about 131,000 out of 163,000 are returned as illiterate.

The percentage of previously convicted prisoners was 20·94 as against 20·28 in 1925 while the number of youthful offenders rose from 343 to 378. The following table shows the **nature and length of sentences** of convicts admitted to jails in 1924 to 1926 :—

Nature and Length of Sentence.	1926.	1925.	1924.
Not exceeding one month	30,637	32,499	30,675
Above one month and not exceeding six months.	64,147	64,286	64,933
„ six months „ „ one year ..	34,971	31,429	30,972
„ one year „ „ five years ..	25,912	23,299	24,975
„ five years „ „ ten „ ..	3,790	3,581	3,856
Exceeding ten years	524	350	514
Transportation beyond seas—			
(a) for life	1,685	1,540	1,475
(b) for a term	36	117	114
Sentenced to death	1,057	988	942

The total daily average population for 1926 was 111,892, the total offences dealt with by criminal courts was 199, and by Superintendents 117,433. The corresponding figures for 1925 were 109,227; 273 and 127,095, respectively.

The total number of corporal punishments showed a decrease, *viz.*, from 210 to 204. The total number of cases in which penal diet (with and without solitary confinement) was prescribed was 5,312 as compared with 4,988 in the preceding year.

Total expenditure increased from Rs. 1,65,58,713 to Rs. 1,71,22,795 and total cash earnings increased from Rs. 24,71,694 to Rs. 25,55,913, there was consequently an increase of Rs. 4,62,654 in the net cost to Government.

The death rate in 1925 excluding the Andamans was 14·42 and including of them 15·34, both being below those for 1923 (14·95 and 16·0) and the decennial mean (22·04 and 23·21).

The Laws of 1928

BY

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Editors of the "Bombay Law Reporter."

1. The Burma Salt (Amendment) Act—Under the Devolution Rules, made under Section 45A of the Government of India Act, the Salt Act has become a central subject. It was, therefore, found necessary to vest in the Governor-General in Council powers of control in respect of that subject. Amendments have been made in the Act to substitute "Central Board of Revenue" in place of "Local Government" and "Superintendent" in place of "Collector."

2. The Indian Securities (Amendment) Act.—The object of this Act is to enable a company to hold Government Securities jointly with a private individual or another corporate body and to empower Government to pay the amount of the security to the surviving joint holder in any case that may arise. It is drawn on the lines of the Bodies Corporate (Joint Tenancy) Act 1899, of England. It enacts that a body incorporated under law shall be deemed to die when it is dissolved.

3. The Indian Income-Tax (Amendment) Act.—The law relating to income-tax is in a state of perpetual flux. Sometimes lacunæ are discovered in the Act which enable persons to escape lightly: sometimes its provisions are found to operate harshly on the payers. To remedy both these defects the present Act was passed. The first amendment enables the assessee to claim exemption for the value of animals used for the purposes of the trade, which die and are not replaced. A new Section (25A) has been added. It meets with the situation when a Hindu family which was joint has been divided before the end of the year previous to assessment. In such a case income tax is assessed on the whole income of the joint family: but the amount is levied on each member *pro rata* his share on partition. Each member, however, continues to remain jointly and severally liable to the income-tax authorities for the whole amount. Section 26 of the Act has been amended to provide for two contingencies. First, when a change has occurred in the constitution of a firm or a firm has been newly constituted, it is competent to the income-tax authorities to assess the firm and its members just as if the firm had been constituted throughout the previous year and as if the members had received their due share of profits in that year. Secondly, where there is a change in the ownership of business the incoming member or members is or are liable to pay income-tax as if he or they had been carrying on the business throughout the previous year. In both cases, legislature has taken precautions to see that a new member or a new concern does not escape payment of the income-tax in the first year of his or its business. It is interesting to inquire how a defunct partnership or an outgoing member is made amenable to income tax on the profit made in the last year of its existence or his membership. Section 42 of the Act has been amended in an important particular. Where a person outside British India imports merchandise into British India and makes profits on their sales by himself or through an agency, he is liable to be assessed to income tax on the amount of such gains or profits.

4. The Inland Bonded (Warehouses) Amendment Act.—Under the law as it stood before the amendment no goods could be taken for warehousing at an inland bonded warehouse unless they had been previously deposited in a warehouse, at a customs port. In practice, however, such goods were removed direct from the wharf or ship's side. The purpose of the present amendment is to legalise the practice which has been found to be convenient.

5. The Indian Finance Act.—The purpose of the present Act is to provide for the continuance of the rates of salt duty, postage, income tax and super tax, during the year 1928, on the existing scale.

6. The Indian Merchant Shipping (Amendment) Act.—Under the Devolution Rules, the subject of shipping and navigation has been allotted to the Government of India. It used to be administered hitherto by the Local Governments as agents of the Central Government. The control is now transferred to the Government of India. To facilitate work during the period of transition, it has also been enacted that the Governor-General in Council may delegate his powers to the local Governments concerned either absolutely or subject to conditions.

7. The Indian Tariff (Amendment) Act—The import duty levied on gold and silver sheets and plates, paper money, illustrations specially made for binding in books, specimens illustrative of natural science, and stone prepared as for road metalling is taken off. The duty imposed on currents is reduced to Rs. 1-4-0 per cwt., and on silver-plated surgical instruments it is reduced from 30 to 15 per cent. The duty on white portland cement is raised from Rs. 9 per ton to 15 per cent. *ad valorem.* A fresh duty of 5 per cent. is levied on imported cotton, hair and canvas ply, belting for machinery.

8. The Steel Industry (Protection) Act—The Act aims at discrimination in the protective duty on steel industry. It removes altogether the protection duty hitherto levied on certain kinds of iron or steel nails and wire. The duty levied on iron or steel belts and nuts including hookbolts and nuts for roofing is reduced from 10 per cent. *ad valorem* to Rs. 2 per cwt.

9. The Indian Territorial Force (Amendment) Act.—This Act and the following one are the outcome of the recommendations made by the Auxiliary and Territorial Force

Committee of 1925. The Indian Territorial Force consists of three kinds of units: (1) the provincial unit: (2) the urban unit: and (3) the University training corps. The third one is left untouched. It is provided that the provincial unit, which will be recruited from all classes of men in a province, will have an extended annual period of training. It will be recognised as the main part of a second line of the regular Indian Army: and it will be liable for military service both within and without the borders of India. The urban unit will be recruited from the educated classes of the large towns. The conditions of training will be similar to those of the Auxiliary force. The status will be like that of the provincial unit: but it will not be called upon for military service beyond the limits of their province. The provisions of this Act and the Auxiliary Force Act are assimilated so far as they relate to urban units.

10. The Auxiliary Force (Amendment) Act.—As stated above, the purpose of the Act is to assimilate the substance of the Auxiliary Force Act to the provisions regarding urban units contained in the Indian Territorial Force Act.

11. The Chittagong Port (Amendment) Act.—The port of Chittagong has developed from a minor port to a major one, forming, as it does, the outlet to the sea of the Province of Assam. It is declared a major port, and the statutory control of its administration is transferred from the Government of Bengal to the Governor-General of India in Council. With a view to give more effective representation to local interests, a Board of Commissioners for the port has been reconstituted. The Board consists of the Chairman, the Collector of the Chittagong District, the Customs Collector of the Port, one Commissioner each appointed by the Governor-General in Council and by the Assam-Bengal Railway; three Commissioners elected by the Chamber of Commerce at Chittagong and three Commissioners elected by the Chittagong Indian Merchant Association; and one Commissioner elected by the Municipal Commissioner of Chittagong. The tenure of elected members is to be of two years.

12. Hindu Inheritance (Removal of Disabilities) Act.—Under the Hindu law as derived from ancient Sanskrit texts a person suffering from congenital lunacy or idiocy is excluded from the right of inheritance in a joint family. This rule had excellent reasons in its support so long as the joint family was the order of the day. The present state of society leans towards disintegration of joint families. It is inequitable, therefore, that the unfortunate lunatic or idiot should be left without any means of support. The Act provides that such a person should not be excluded from inheritance or from any right or share in joint family property by reason only of any disease, deformity or physical or mental defect.

13. The Indian Mines (Amendment) Act. The purpose of this act is to ameliorate the condition of labourers working in the mines. No mine is allowed to work for more than twelve hours out of twenty-four through the same set of workmen. If continuous work is desired for all the twenty-four hours in a day, it can be done by adopting a system of shifts of twelve hours from a batch of workmen (Section 23A). In all cases, it is obligatory on the owners of mines to put up notices outside the offices stating the hours of work and the shifts of workmen.

14. The Indian Succession (Amendment) Act.—The administrator of the property belonging to a deceased person can obtain a certificate in respect of any debt or debts due to the deceased creditor or in respect of portions thereof. He is relieved from the necessity of taking out the certificate for the whole estate.

15. The Indian Trade Unions (Amendment) Act.—Section 10 of the principal Act has been remodelled with a view to dispel doubts that existed regarding the powers of appeal under the Act. Where the Registrar refuses to register or cancels the registration of a trade union the aggrieved union if situated within the limits of a presidency town or Rangoon may appeal to the High Court, or if the head-office is situated in any other area may appeal to the Court not inferior to that of an additional or assistant Judge. In the latter case, there is a right of further appeal to the High Court.

16. The Indian Income-Tax (Amendment) Act.—The administration and control of the department for collecting income-tax have passed into the hands of the Governor-General of India under the Devolution Rules. The practice hitherto was for the Central Government to consult the local Government concerned before making an appointment to a Commissionership of income-tax. This practice is now done away with and an all-India cadre of Commissioners of Income-tax is created.

17. The Match Industry (Protection) Act.—The Government of India had levied import duty on matches and their materials. It is now converted into a protective duty on the recommendation of the Tariff Board. A duty of Rs. 1-8-0 is levied on a gross of boxes each box containing 100 matches. A duty of Rs. 0-4-6 is levied on every pound of undipped splints such as are ordinarily used for match-making; while veneers used for making boxes are subjected to a duty of Rs. 0-6-0 per pound.

18. The Repealing And Amending Act. The purpose of this Act is to remove or rectify obsolete provisions in the Acts of the Imperial Legislature. One noteworthy amendment in Section 16 of the General Clauses Act of 1917 is to make it clear that the authority empowered to make an appointment has also the power of suspending or dismissing a person appointed in the exercise of the same power by another authority. It is also made clear that the exemptions granted by the Stamp Act to combatants are extended to non-combatants enrolled under the Indian Army Act 1911. An important amendment has been made to Section 98 of the Civil Procedure Code 1908, which says:—"Nothing in this Section (98) shall be deemed to alter or otherwise affect any provision of the Letters Patent of any High Court."

19. The Madras Salt (Amendment) Act. An officer making an arrest is given the power to release an accused person on bail for his appearance before the Inspector. This will

minimise the inconvenience and hardship that an accused person may be otherwise put to, of either having to wait for some time or to go some distance before he is liberated on bail.

20. The Indian Insurance Companies Act.—A new Section (26A) has been inserted in the Indian Life Insurance Companies Act 1912, which provides that in case of liquidation of a life assurance company the surplus of any profits shall be allocated to shareholders in the proportion in which the profits were allocated during the last ten years. This is enacted with a view to protect the interests of policy-holders. A new part (Part III) has been added to the main Act, containing provisions as to insurance business. Every such insurance company has every year to deposit with the Governor-General in Council four copies of the report on the affairs of the company, balance sheet, revenue account and profit and loss account (Sec. 7). Such company is under an obligation to report to the Governor-General in Council (1) the amount of premiums derived from business effected in India; (2) the amount of claims paid to claimants in India, and (3) the amount of claims paid to claimants outside India (Sec.8). It has also to submit a statement showing the investment of the company in India in Government securities and otherwise (Sec. 9. Non-compliance with the provisions of the Act (Se.16) and falsification of accounts are penalised (Sec. 17). These offences are triable either by a Presidency Magistrate or a Magistrate of the First Class (S. 18). A company doing the work of re-insurance on contract of insurance effected by the companies is not affected by the Act (Sec. 19) A provident insurance society can be exempted from the operation of the Act (Sec.20)

21. The Indian Succession (Second Amendment) Act—In 1926 the Indian Succession Act of 1925 was so amended as to make it obligatory that all wills made by Hindus, Buddhists, Sikhs and Jains after January 1, 1927, should be reduced to writing, signed and attested. The present Act makes it clear that it is not obligatory that all such wills should compulsorily require probate or letters of administration.

Labour.

Various causes hav e combined to give added importance to the great group of human activities concentrated under the generic term of Labour. India is still a predominantly agricultural country and more than seventy per cent. of its people are dependent on the soil for their livelihood. Nevertheless a process of industrialisation has gone steadily forward. Calcutta and Bombay are great manufacturing cities. Whilst the jute mills dominate Calcutta and the cotton mills Bombay, there has grown up round these industries a substantial body of other manufactories. Another considerable manufacturing centre has developed at Cawnpore, with cotton, wool and leather factories. The textile industry of Bombay has overflowed into the mofussil, and Ahmedabad and Sholapore are considerable centres of manufacture, with a lesser one at Broach. There are also a fairly large number of cotton mills in Baroda state. In the Central Provinces the cotton mills of Nagpur are famous throughout India. The Province of Bihar and Orissa is the centre of the great coal mining trade, having absorbed the bulk of the coal mines formerly included in the Province of Bengal. It also embraces the most remarkable example of scientific industrialism in India in the works of the Tata Iron and Steel Company at Jamshedpur, where in what was jungle fifteen years ago a considerable city has sprung up, which produces over a million tons of steel a year, and houses subsidiary industries which combined with the iron and steel works will probably maintain a city of a quarter of a million in the near future. The railway works of the North-Western Railway form the core of the industrialism of the Punjab, where other manufactories are developing. The industrial expansion in India may be judged from the number of factories coming under the operation of the Indian Factories Act of 1911 as amended by the Act of 1922, which amounted to 6,926 for the whole of British India during the year 1925 and rose in 1926 to 7,251. The number of operatives in the same years were 1,494,958 and 1,518,391 respectively, the figures being of the daily average. The industrial development of the Punjab is certain in the comparatively near future to receive considerable impetus from the fruition of vocational education and the completion of the vast hydro-electric schemes.

Social Consciousness.

Side by side with this industrialization there has grown an increased social consciousness of the responsibility of the community towards Labour. The Government of India passed its first Factory Act in 1881 and amended it in 1891. But experience showed that these Acts permitted considerable abuses and largely as the result of the agitation raised by *The Times of India* in Bombay in 1905 against the excessive hours worked in the Bombay textile mills inquiries were set afoot which resulted in the passing of a new Act which limited the hours of labour in 1911. With the constitution of the League of Nations, India as a signatory thereto became a participator in the decisions of the League on Labour questions. India was represented at the International Labour Conference held in Washington in 1919 and by her ratifying various conventions it became obligatory on her to enact legislation giving effect to the decisions of the Conference. Another International Labour Conference was held at Genoa in 1920 to consider a number of questions relating to seamen, such as the hours of labour, manning scales, accommodation, the provision for finding employment and other cognate questions and the Third and Fourth Sessions of the Conference were held at Geneva in 1921 and 1922. The Fifth Session of the Conference assembled on 22nd Oct. 1923 and dealt with only one item of importance—factory inspection. The Sixth Session of the Interna-

tional Labour Conference was held in Geneva from the 16th June to the 5th July 1924. Forty countries were represented at the Conference. The agenda of the Conference comprised (1) Development of facilities for utilisation of workers' leisure, (2) equality of treatment for national and foreign workers as regards compensation for accidents, (3) weekly suspension of work for twenty-four hours in glass manufacturing processes where tank furnaces are used: and (4) night work in bakeries. The Seventh Season was held at Genoa on the 21st May 1925. The agenda consisted of three main items—(1) equality of treatment for national and foreign workers as regards compensation for accidents; (2) weekly suspension of work for 24 hours in glass manufacturing processes where tank furnaces are used; and (3) night work in bakeries. The Eighth Session of the Conference was held at Geneva on the 26th May 1926 and the Ninth Session immediately after on the 7th June. The Eighth Session dealt with the question of the simplification of the Inspection of Emigrants on Boardships. The Ninth Session was devoted entirely to the consideration of maritime problems—the main question dealt with being the International Codification of the Rules relating to Seamen's articles of agreement, and general principles for the inspection of the conditions of work of seamen. The Tenth Session of the International Labour Conference was held at Geneva from 25th May to 16th June 1927. The principal items on the Agenda of the Conference were (1) Sickness Insurance, (2) Freedom of Association, and (3) Minimum Wage Fixing Machinery. The Eleventh Session was held from the 30th May to 16th June, 1928. The Agenda included (1) Minimum Wage Fixing Machinery, and (2) Prevention of Industrial Accidents. The Conference adopted a Draft Convention concerning the creation or maintenance, of Minimum wage of fixing machinary in trades, particularly home working trades to be determined by each State. A Recommendation embodying the general guiding principles for the application of such machinery was also adopted. The second item was considered under three heads (*a*) General Prevention of Industrial Accidents, (*b*) Protection against Accidents of workers employed in loading and unloading ships, and (*c*) Prevention of coupling accidents on Railways. Draft Questionnaires on (*a*) and (*b*) were adopted and a joint committee of Governments', employers and workers was appointed to study the question of coupling accidents, with special reference to the use of automatic couplings. At the same Conference, elections for the Governing Body for the next three years were held on the basis of Article 393 of the Peace Treaty. Out of the 26 Conventions adopted by the ten sessions of the International Labour Conference, the Government of India had ratified 11 Conventions till July 1928. In three cases, legislative or other measures were in existence in India prior to the adoption of the Conventions by the Conference and in eight cases legislation was passed after ratification. The Government of India have also passed or are considering the framing of legislation in the case of four other Conventions not officially ratified by them. India was represented at all of these Conferences. In 1922 India was admitted as one of the eight countries of industrial importance after protracted examination of the grounds of her claim by experts appointed by the League of Nations. India therefore assumes responsibility for giving effect to the decisions of these Conferences if she ratifies them.

There has been a considerable extension of what is known as **Welfare Work**, and although this so far depends on the individual activities of employers of labour the work is progressing well. The Sixth International Labour Conference which dealt with the question of the utilisation of workers' spare time resolved that the International Labour Office should collect periodic information on the action taken in various countries for the development of facilities for the proper utilisation of the time during which workers are not actually employed. In May 1926. the Government of India requested all Local Governments to collect information on this subject from employers' and employees' associations and associations of social workers who conduct welfare work for the benefit of workers. The results of this enquiry which the Government of India hope to publish in due course will be of considerable interest. The results of the enquiry conducted in the Bombay Presidency which have been published in the January 1927 issue of the *Labour Gazette* show that facilities for education for employees are provided by some textile mills, Railways and the Bombay Port Trust. Very little provision is made by employers for providing reading rooms or libraries for their employees. The main factor governing this would appear to be the illiteracy of the majority of Indian workers. Employers' Associations and Associations of social workers such as the Social Service League, the Young Men's Christian Association, and the Labour Union, Ahmedabad, provide several schools, libraries and other educational facilities for the workers. The provision of facilities for medical attendance and the supply of medicines, appears to be fairly general in all the labour employing organizations in the Bombay Presidency. Either nominals or no charges are made in most cases. In certain mills '*creches*' are also conducted for the benefit of women workers and their children. The Labour Union, Ahmedabad, is the only employees' association which does pioneer work in the direction of providing medical facilities for its members. The Social Service League, Bombay, conducts a charitable dispensary for the benefit of women and children. Provisions for recreational facilities, such as games, lectures, shows, dramatic performances, etc., are provided by employers in some cases. In certain cases, the facilities are restricted to only a particular class of employees. Facilities for some sort of indoor and outdoor games and for entertainments are also provided by the Social Service League, the Young Men's Christian Association and the Labour Union, Ahmedabad, who do far more extensive work in this direction than all the other organisations put together.

With a view to carrying out some of the proposals contained in the Draft Convention regarding Maternity Benefits passed by the First International Labour Conference held at Washington in 1919, a private Bill was intro-

duced in the Bombay Legislative Council on the 19th March 1928, to regulate the employment of women in factories sometime before and some-time after confinement and to make provision for the payment of maternity benefits. The Bill provided that in any factory a woman shall not be knowingly employed during the six weeks following her confinement ; that she shall have a right to leave work on production of a medical certificate to the effect that her confinement will take place within about six weeks ; and that during the period of her absence, both before and after her confinement, she should be paid an amount of benefit by Government from a Fund to be maintained for the purpose. Any employer contravening the provisions of the Bill was liable to pay a fine which may extend to Rs. 500. The Select Committee, to whom the Bill was referred, limited the scope of the Legislation to certain principal industrial towns in the first instance, reduced the maximum period of compulsory absence to three weeks before and four weeks after confinement, made provision for the payment of benefits by the employers and suggested penalties for infringement by the woman herself of the provisions of the Bill intended for her benefit.

There is also the rapidly developing Trade Union movement in India. This movement is of comparatively recent growth and in its earlier stages, immediately after the war, it lay more on the surface than in deep roots and flared up in times of labour unrest. The majority of the Trade Unions in India are affiliated to the All-India Trade Union Congress. The year 1928 saw a recrudescence of an unparalleled number of strikes in almost all industries and in almost every province in India. The frequency of these strikes and the lack of any means to hasten a solution have given rise to the formulation by the Government of India of a Bill for the appointment of Courts of Inquiry, and Boards of Conciliation, prevention of lightning strikes in public utility services and the declaration of strikes, which may tend to coerce the Government or to intimidate any substantial portion of the community, illegal. The basis on which the Bill has been framed is on a principle of voluntary conciliation. Fuller details will be found below under the section dealing with "Trade Disputes Legislation."

The last few years have seen a remarkable change in the attitude of the State and the community towards labour which under the more democratic constitution which now obtains and owing also to the activities of the International Labour Organization is assured of a hearing in the Legislatures.

INDUSTRIAL SAFETY AND INSPECTION.

The conditions of factory labour until 1913 were regulated by the Indian Factories Act of 1881, as amended in 1891. The chief provisions of the amended Act were Local Governments were empowered to appoint inspectors of factories, and certifying surgeons to certify as to the age of children. A mid-day stoppage of work was prescribed in all factories, except those worked on an approved system of shifts, and Sunday labour was prohibited, subject to certain exceptions. The hours of employment for women were limited to 11, with intervals of rest amounting to at least an hour and a half; their employment between 8 p.m. and 5 a.m. was prohibited, as a general rule, except in factories worked by shifts. The hours of work for children (defined as persons below the age of 14) were limited to seven, and their employment at night time was forbidden; children below the age of nine were not to be employed. Provision was made for the fencing of machinery and for the promulgation of rules as to water supply, ventilation, the prevention of over-crowding, etc.

Hours Fixed.

The next Factory Act was finally passed into law as Act XII of 1911.

The new Act extended the definition of "factory" so as to include seasonal factories working for less than four months in the year; shortened the hours within which children, and, as a general rule, women, may be employed, and further restricted the employment of women by night by allowing it only in the case of cotton-ginning and pressing factories. It also contained a number of new provisions for securing the health and safety of the operatives, making inspection more effective, and securing generally the better administration of the Act. The most important feature of the Act, however, was the introduction of a number of special provisions applicable only to textile factories. The report of the Factory Commission showed that excessive hours were not worked except in textile factories. The Act for the first time applied a statutory restriction to the hours of employment of adult males by laying down that, subject to certain exceptions, "no person shall be employed in any textile factory for more than twelve hours in any one day." It is also provided in the case of textile factories that no child may be employed for more than six hours in any one day, and that (subject to certain exceptions, among which are factories worked in accordance with an approved system of shifts) no person may be employed before 5-30 a.m. or after 7 p.m. (the new limits laid down generally for the employment of women and children).

The Amending Acts of 1922 and 1923.

The ratification by India of the conventions adopted by the International Labour Conference held at Washington in 1919 necessitated radical revision of the Indian Factories Act of 1911. This was undertaken during the year 1921 and the Indian Factories Amendment Act, 1922 (II of 1922) introduced a series of important reforms including the adoption of a sixty hours' week, the raising of the minimum age of children from 9 to 12, the prohibition of night work for women, the extension of the Act to a large number of small factories, drastic restriction of the exempting provisions, etc. The Act was further amended in 1923. The principal object of the

Amending Act of 1923 was the removal of a difficulty which had arisen in connexion with the law relating to the weekly holiday.

The Amending Act of 1926.

The experience gained during the three years which immediately followed the revision of the Act in 1922 indicated that the Amending Act had worked smoothly on the whole and that the main principles followed in 1922 commanded general acceptance. It was not considered necessary, therefore, to modify any of the main principles of the Act: but several administrative difficulties had arisen in connexion with some sections of the Act—one such difficulty relating to Section 21 which provided for intervals of rest. In practice it had proved difficult to enforce the provisions of this section in some industries. Local Governments were asked in June 1923 to consider a possible solution of the difficulty and to bring to the notice of the Government of India any difficulties which might have arisen in connexion with other provisions. On receipt of their replies, a Conference of Chief Inspectors of Factories was convened. The Conference recommended a number of alterations designed by allowing greater elasticity in some directions and by increasing control in others to make for smoother working. The Factories Amendment Act of 1926 was, therefore, based on the recommendations of that Conference and on the opinions received from the Local Governments. The more important alterations effected include the widening of the definition of 'Factories' so as to bring within the control of the Act such establishments as Electrical Generating Stations, Water Works, etc., the prevention of the issue of age certificates by Certifying Surgeons tochildren who are not fit for employment; the prevention of cleaning machinery in motion even by men in cases where Local Governments are of opinion that the work is attended by danger to the operatives; a clearer definition of the periods prescribed for intervals of rest; and, while still preventing the employment of children in two factories on the same day, the permitting of women to work in two factories on the same day provided that the limits for hours of work are not exceeded.

The Present Law.

In the following paragraphs it is intended to give the more important provisions of the present law on the subject by combining the Act of 1911 with the Amending Acts of 1922, 1923 and 1926. The Amending Act of 1922 came into force on the 1st July 1922 and that of 1926 on the 1st June 1926. The Act extends to the whole of British India including British Baluchistan and the Sonthal Parganas.

Hours of Employment.

Rest periods in factories.—(1) In every factory there shall be fixed,—

(*a*) for each person employed on each working day—

(*i*) at intervals not exceeding six hours, periods of rest of not less than one hour, or

(*ii*) at the request of the employees concerned, periods of rest, at intervals not exceeding five hours, of not less than half an hour each, the total duration of the periods of rest on that day not being less than one hour for each period of six hours' work done.

Provided that, in lieu of the period provided under sub-clause (*i*) or sub-clause (*ii*) there may be fixed per each male person employed for not more than eight and a half hours on each working day, at the request of the employees concerned and with the previous sanction of the local Government, a period of rest of not less than half an hour so arranged that no such person shall work for more than five hours continuously and

(*b*) for each child working more than five and a half hours in any day, a period of rest of not less than half an hour.

(2) The period of rest under clause (*b*) shall be so fixed that no such child shall be required to work continuously for more than four hours.

Weekly Holiday.—(1) No person shall be employed in any factory on a Sunday, unless—

(*a*) he has had, or will have, a holiday for a whole day on one of the three days immediately preceding or succeeding the Sunday, and

(*b*) the manager of the factory has previous to the Sunday or the substituted day, whichever is earlier, given notice to the Inspector of his intention so to employ the said person and of the day which is to be substituted and has at the same time affixed a notice to the same effect in the place mentioned in section 36.

Provided that no such substitution shall be made as will result in any person working for more than ten consecutive days without a holiday for a whole day.

(2) Where in accordance with the provisions of sub-section (1) any person is employed on a Sunday in consequence of his having had a holiday on one of the three days preceding that Sunday, that Sunday shall, for the purpose of calculating the weekly hours of work of such person, be deemed to be included in the preceding week.

Employment of Children.—With respect to the employment of children in factories the following provisions shall apply:—

(*a*) no child shall be employed in any factory unless he is in possession of a certificate granted under section 7 or section 8 showing that he is not less than twelve years of age and is fit for employment in a factory and while at work carries either the certificate itself or a token giving reference to such certificate;

(*b*) no child shall be employed in any factory before half-past five o'clock in the morning or after seven o'clock in the evening;

(*c*) no child shall be employed in any factory for more than six hours in any one day.

Employment of Women.—With respect to the employment of women in factories the following provisions shall apply:—

(*a*) no woman shall be employed in any factory before half-past five o'clock in the morning or after seven o'clock in the evening;

(*b*) no woman shall be employed in any factory for more than eleven hours in any one day.

Prohibition of Employment of Person in two Factories on Same Day.—No person shall employ, or permit to be employed, in any factory any child or, save in such circumstances as may be prescribed, any other person whom he knows, or has reason to believe, to have already been employed on the same day in any other factory.

Hours of Employment to be fixed.—The manager of a factory shall fix specified hours for the employment of each person employed in such factory, and no person shall be employed except during such hours.

Limitation of Working Hours per Week.—No person shall be employed in a factory for more than sixty hours in any one week.

Limitation of Working Hours per Day—No person shall be employed in any factory for more than eleven hours in any one day.

Exceptions.

Where it is proved to the satisfaction of the Local Government—

(*a*) that any class of work in a factory is in the nature of preparatory or complementary work which must necessarily be carried on outside the limits laid down for the general working of the factory; or

(*b*) that the work of any class of workers is essentially intermittent; or

(*c*) that there is in any class of factories any work which necessitates continuous production for technical reasons; or

(*d*) that any class of factories supplies the public with articles of prime necessity which must be made or supplied every day; or

(*e*) that in any class of factories the work performed by the exigencies of the trade or by its nature, cannot be carried on except at (*i*) stated seasons or (*ii*) at times dependent on the irregular action of natural forces;

the Local Government may, subject to the control of the Governor-General in Council, by notification in the local official Gazette, exempt on such conditions, if any, as it may impose, and in such area as may be specified in the notification—

in case (*a*) such class of work from all or any of the provisions of sections 21, 27 and 28;

in case (*b*) work of the nature described from all or any of the provisions of sections 21, 22, 26, 27 and 28.

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The system of inspection is being steadily improved by the appointment of more whole-time inspectors with good technical qualifications in the principal industrial centres. The principle of appointing women as factory Inspectresses has already been accepted by the Government of Bombay and a beginning was made in the year 1924 by the appointment of Dr. Tehmina I. H. Cama as a whole-time Inspectress of Factories.

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In order to regulate and ultimately prohibit the employment of women underground in mines the Government of India have framed Regulations for promulgation in exercise of the powers conferred by Section 29 of the Indian Mines Act, 1923. In the Regulations, mines are differentiated under two categories : 'exempted mines,' *viz.*, coal mines in Bengal, Bihar and Orissa and the Central Provinces and the salt mines in the Punjab in which women were employed in underground workings during any part of the year 1926 ; and 'unexempted mines' *viz.*, mines in the rest of the Provinces in India, The term 'underground workings' is defined as 'any part of a mine situated beneath the superjacent ground and includes vertical shafts provided for access to, or for the ventilation of such workings.' The proposed Regulations provide that 'On or after the 1st day of April 1929, no woman shall be permitted to enter or remain in the underground workings of any mine unless (*a*) she has the express permission of the Chief Inspector, or (*b*) in the case of an exempted mine, she has upon her person prominently displayed a valid token issued under Regulation No. 4 and bearing the name of that mine.' The remaining Regulations deal with the procedure to be applied by a system of issuing tokens to eliminate gradually the employment of women in the exempted mines over a period of ten years beginning with 1st April 1929.

INDUSTRIAL HOUSING.

In most industrial centres in India the question of proper and adequate housing is engaging the attention of all public bodies and governments to an increasing extent. Employers themselves are becoming increasingly alive to this burning question and whenever finances permit tenements are constructed for the housing of the workmen. In cases where housing is provided the amounts charged for rent are just sufficient to cover the interest charges on the capital outlay. In Bombay City, where the housing question was one of great difficulty a few years ago, the City Improvement Trust and the Development Directorate of the Government of Bombay have done much useful work in endeavouring to solve the problem. The scheme originally outlined by the Development Directorate for Industrial Housing aimed at a construction programme of 50,000 tenements providing accommodation for a quarter million people and to be completed within a period of eight years. This scheme was conceived in the boom period when labour conditions in Bombay were probably abnormal. By the end of December 1928 the Directorate had 207 chawls comprising 16,524 tenements completely ready for occupation out of which 7,277 were let. Out of the tenements occupied 7,157 were used for residential purposes and 120 for shops. Government have decided that until the tenements now provided are fully occupied no additional land is to be taken for Industrial Housing and that no new schemes are to be embarked upon without Government approval.

The average economic rent of the chawl works out at Rs. 16 per month per tenement. All the tenements are now provided with *nahanis*. The rents fixed for the present, per month, for each tenement, vary from Rs. 5-0-0 at Worli to Rs. 9-8-0 at DeLisle Road. The Development Department proposed to let out chawls *en bloc* at reduced rents in order to induce employers of labour, societies, etc., to lease whole chawls for their employees or other members of the public in whose welfare they are interested. The scale of rents for chawls, each containing eighty one-room tenements, (including charges for maintenance and repairs, sweeper and sanitary stores) *plus* municipal taxes extra, with effect from 1st April 1927 until further orders, were :—Rs. 3,862 at Worli, Rs. 5,478 at Naigaum, and Rs. 7,398 at DeLisle Road. At Sewri, the chawls were all occupied by individual tenants. The above rents work out at Rs. 7-11-0 per room at DeLisle Road, Rs. 5-11-0 at Naigaum, and Rs. 4-0-0 at Worli. Despite this offer it is reported that no Trade Unions took advantage of the proposals. On the basis there is an annual loss of about Rs. 20 lakhs and this is being met from the cotton cess and other sources.

The City Improvement Trust in Bombay have also made very good progress in the direction of providing industrial housing. The Trust had a total number of 9,523 tenements ready at the end of March, 1928, out of which 8,077 tenements were let for living purposes, 113 as shops, 36 as godowns and 214 for weavers' looms. 54 tenements were reserved for occupation by Muccadams, for offices and stores, and as Superintendents' Quarters. The floor area of each tenement inclusive of a small verandah varied from 120 square feet to 176 square feet but the majority of the tenements were provided with the maximum floor space allowed. The average rent for a tenement in an Improvement Trust chawl works out at Rs. 5-10-0 but the actual rents vary from Rs. 4-9-0 to Rs. 15-5-0. The maximum permissible population in adults for a total of 8,077 tenements has been fixed at 37,699. The actual population living in these tenements, at the end of the year 1927, was 29,563 or 26,907 when equalised to adults.

According to the results of the enquiry conducted by the Labour Office of the Government of Bombay into 'Welfare Work' carried on by employers, employees' associations and associations of social workers in the Bombay Presidency, private employers have taken interest in the question of industrial housing and have contributed their quota to promote better housing accommodation for their employees. Nearly fifty per cent. of the textile mills in the Presidency have made arrangements to provide sanitary dwellings for their employees. The total accommodation provided is not yet sufficient and the percentage of workers who are benefited varies from 12 to 42. The Railways provide either free quarters, or quarters at economic rent or rent allowance in lieu of quarters, to those employees who are entitled to free quarters or are required to live near their work. The Bombay Port Trust provides housing for 4,559 of its employees, the Bombay Municipality for 5,704 and the Karachi Municipality accommodates about 500 of its employees free of charge. The rents charged in all cases, are much below the economic rent

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represents a slightly higher proportion of successful strikes than in the preceding years. The corresponding figures for 1926 were much better. They indicated that there was less industrial strife in that year than in any other recent year. The number of strikes recorded was 128, which was lower than that of any year since 1920, when the collection of statistics commenced. The total number of working days lost through strikes and lock-outs was approximately 11 lakhs against an average of 74 lakhs in the preceding five years. In fewer than one-fifth of the strikes were the workmen sucessful in gaining any concession.

The statistics of industrial disputes for the year 1927 show that although the number of disputes during the year was but one more than in the previous year and the number of work-people affected was less by about a lakh, the time-loss to the industry as a whole, was nearly double that in the year 1926. The following are the detailed figures for the year 1927 :—

General Effects of Disputes by Provinces.

Province.	Number of Disputes.	Number of Workpeople involved.	Number of Working Days lost.
Bengal	34*	66,674	1,464,889
Bombay	54	28,078	165,061
Madras	19*	17,905	187,441
Central Provinces	2	1,950	79,378
United Provinces	3	1,291	8,789
Bihar and Orissa	4*	4,319	73,570
Assam	12	10,975	33,586
Burma	3	463	7,256
British India	129	131,655	2,019,970

The following table shows the data given above reclassified according to different classes of Industries :—

General Effects of Disputes by Classes of Industry.

Industry.	No. of disputes.	No. of Men involved.	Days lost.
Cotton Mills	60	36,089	350,011
Jute Mills	11	34,296	234,715
Engineering Workshops	6	4,042	27,095
Railways (including Railway Workshops).	3	32,114	1,250,421
Others	49	25,114	157,728
Total ..	129	131,655	2,019,970

The next two tables show the causes of disputes by Provinces and Classes of Industries.

Causes of Disputes by Provinces.

Province.	Pay.	Personnel.	Leave and Hours.	Others.
Bengal	18	6*	3	7
Bombay	27	17	..	10
Madras	4	11*	1	3
Central Provinces	1	..	..	1
United Provinces	2	1	..	..
Bihar and Orissa	1	1*	1	1
Assam	7	..	..	5
Burma..	1	2	..	..
British India	61	36	5	27

* One strike extended to three Provinces.

Causes of Disputes by Classes of Industries.

Industry.	Pay.	Per-sonnel.	Leave and Hours.	Others.
Cotton Mills	27	22	1	10
Jute Mills	5	2	2	2
Engineering Workshops	3	2	..	1
Railways (including Railway Workshops) ..	..	3	..	..
Others	26	7	2	14
Total ..	61	36	5	27

The following tables show the results of the disputes mentioned in the two preceding tables :—

Results by Provinces.

Province	Successful.	Partially Successful.	Un-successful.	In Progress.
Bengal	5	3*	24	2
Bombay	7	7	40	....
Madras	1	10*	8	....
Central Provinces	....	1	1	....
United Provinces	....	1	2	....
Bihar and Orissa	....	3*	1	....
Assam	2	7	3	....
Burma	....	2	....	1
British India	15	32	79	3

* One strike extended to three provinces.

Results by Classes of Industries.

Class of Industry.	Successful.	Partially Successful.	Un-successful.	In Progress.
Cotton Mills	6	7	47	....
Jute Mills	1	....	10	....
Engineering Workshops	....	4	2	....
Railways (including Railway Work-shops)	....	3	....	....
Others	8	18	20	3
Total ..	15	32	79	3

The year 1928, for which statistics of industrial disputes for the whole of India have not yet been published, was a period of great industrial unrest in India. Lightning strikes occurred in various Provinces and several of them were of unusually long duration. A big strike of the employees of the G. I. P. Railway was threatened but the conciliatory attitude adopted by the Railway authorities saved the situation. The strikes of the operatives of the textile mills at Sholapur and Cawnpore and the sweepers of the Calcutta Corporation were among disputes of some magnitude, but the more important major disputes were the General Strike in the Bombay Cotton Mills, the strikes and lockouts on the E. I. Railway, the S. I. Railway and the Iron and Steel Works at Jamshedpur. The causes, progress and the results of each of these four major disputes are summarised below :—

The General Strike in the Cotton Mills in Bombay City lasted from the 26th April to the 4th October 1928, and involved 147,644 workpeople. The main cause of the strike was the introduction of new systems of work in accordance with the recommendations of the Textile Tariff Board, whereby a weaver was to tend three looms instead of two and a spinner to mind double frames instead of a single frame as before. The new systems of work, which were adopted for achieving greater efficiency of labour, naturally involved retrenchment of hands. The hours of work for certain operatives were increased and additional emoluments in the form of bonus, etc., were curtailed. These reforms were begun to be gradually introduced from the middle of the year 1927 and several strikes of the operatives occurred since August 1927 as a protest. The moderate labour leaders who then completely controlled the textile labour force in Bombay City were opposed to a general strike and brought about a settlement of disputes in individual mills on the best terms possible. Subsequently, however the members of the Bombay Branch of the Workers and Peasants Party, a Communist organisation, exercised a considerable influence over the cotton mill operatives, and mainly as a result of their instigation, the operatives of the Currimbhoy group of mills struck work on the 16th April, and brought out the men of all the other cotton mills in Bombay City, with the exception of those in the Colaba Land Mill, by the 26th April. The employers were not given previous notice of the proposed strike or of the grievances of the men. The extremist leaders, mostly Communists, carried on intensive propaganda amongst the strikers by holding frequent meetings, issuing pamphlets, etc., and emphasised the need for a general strike to solve the economic ills of the operatives. In the speeches that were delivered to the strikers, constant references were made to the alleged apathy of the Millowners and the Government to the cause of the workers who were exhorted to carry on the strike till their grievances were redressed. In view of the serious situation thus created, H. E. the Governor of Bombay came down to Bombay from Mahableshwar and granted separate interviews on the 27th April to the representatives of the Millowners' Association and the Bombay Textile Labour Union and the Girni Kamgar Mahamandal. The Millowners' Association assured His Excellency that they would be prepared to open negotiations with the representatives of registered Unions of Textile mill operatives. This was the first instance in the Bombay Presidency where the special status of a Trade Union as the result of registration was publicly recognised. As a result of the visit of His Excellency, the extremists and the moderate labour leaders joined hands and formed a Joint Strike Committee on the 1st May and prepared a statement of the demands of the strikers and forwarded the same to the Millowners' Association on the 3rd May 1928. The statement contained 17 demands, which included (1) the restoration of the wage rates that prevailed in 1925 ; (2) that the hours of work of any class of workers should not be increased without the consent of the workers concerned and without granting overtime pay for the additional time put in ; (3) that the new systems of work should not be introduced or continued without the consultation and free consent of the workers expressed through their organisation ; (4) the necessity for making standard rules for all mills ; and (5) that no member of the Association should be allowed to alter the conditions of service to the disadvantage of the workers. On the 12th May the Millowners' Association issued a press communique replying to the 17 demands put forward by the Joint Strike Committee. They denied any reductions in wages and laid stress on the need for a standardised muster and a standardised schedule of rates of wages. They also stated that it was essential that disciplinary measures should be strictly enforced.

As the Millowners' Association refused to have anything to do with the Joint Strike Committee as it was composed of officials of unregistered Unions also the Mill Workers' Union, the Girni Kamgar Mahamandal and the Bombay Girni Kamgar Union got themselves registered under the Indian Trade Unions Act and every member of the Joint Strike Committee thus became connected with one or other of the registered Unions of cotton mill operatives in Bombay City. The Hon'ble the General Member of the Government of Bombay met deputations from the Millowners and the Joint Strike Committee on the 15th May with a view to smoothing the way for a Round Table Conference.

The Millowners' Association published a statement in the Press on the 16th June defining the terms on which they would be prepared to re-open the mills. The terms included the unequivocal acceptance by the strikers, of the following :—(1) Standardised rates of wages as prepared by the Millowners ; (2) Revised and standardised muster rolls ; (3) full ten hours work for all male operatives ; and (4) a revised set of Rules and Regulations with a view to enforce stricter discipline than obtained in the past. The Joint Strike Committee issued a rejoinder on the same day pointing out that the financial history of the industry did not warrant a reduction in wages and that in the preparation of the schemes of standardisation the Millowners had not consulted the workers' representatives. In reply, the Millowners stated in a Press note, that the profits made by the mills were not, after all, high, and pointed out that the cost of living for workers had gone down.

On the 7th June, two representatives of each of the four registered Trade Unions of cotton mill workers in Bombay City were invited by the Millowners' Association to meet 8 members of their Negotiation Sub-Committee. The representatives of both sides met about half a dozen times before negotiations broke down over the question of the proposed cut in the rates of wages for weavers. On the 3rd July, the Millowners' Association posted notices at the mills announcing the terms on which the strikers could resume work and also arranged for the standardisation schemes being clearly explained to the operatives at the mills. Attempts at a settlement of the disputes having failed, the Joint Strike Committee decided to start vigorous picketing at the mills. On the advice of the Commissioner of Police, only two picketers were posted at each mill. Several women workers volunteered their services as picketers. The Millowners' attempted to reopen the mills in batches with effect from the 6th August. The propaganda carried on by the Joint Strike Committee was, however, so complete that the gesture made by the Millowners met with no response from the strikers and consequently the Association gave up the programme.

The Hon'ble the General Member convened a joint conference of the representatives of the Millowners and the Joint Strike Committee on the 15th and 16th June in order to ascertain if they would agree to the dispute being referred to a Conciliation Board. The conference broke down on the question of the immediate calling off of the general strike. Subsequently Dr. G. V. Deshmukh, President of the Bombay Municipal Corporation, exerted his utmost to bring the parties to the dispute together and to arrive at terms satisfactory to both sides but with no effect. The representatives of the Joint Strike Committee again met the represenaitives of the Millowners' Association during the last few days of September, in order to explore the possibility of arriving at an amicable settlement, but no agreement could be reached on the question of a cut of 7½ per cent. proposed by the Millowners' Association in the rates of wages of weavers. At this stage, another joint conference of the representatives of the two parties was called by the Hon'ble the General Member on the 4th October at which satisfactory terms of settlement were arrived at. According to the terms, the general strike was to be called off on the 6th October 1928, pending the report of a Committee to be appointed by Government to enquire into the whole dispute. The rates of wages were to be those prevalent in March 1927 and rates of advances to be paid to the strikers during the next two months were also specified. The strikers began to resume work from the 6th October and the mills resumed normal working by the 11th October. In accordance with the agreement arrived at on the 4th October, the Government of Bombay appointed the following Committee—

Sir Charles Fawcett, Kt., I.C.S., Judge of the High Court of Judicature, Bombay, (*Chairman.*)

Mr. M. P. Kharegat, I.C.S., (Retired Judge), and M. B. S. Kamat, *Member*.

with Mr. N. A. Mehrban, Investigator, Labour Office, and Assistant to the Registrar of Trade Unions, Bombay Presidency, as Secretary.

The terms of reference to the Committee were :—(*a*) Whether the amended scheme of a standardised schedule of rates and of a standardised muster prepared by the Millowners' Association, and also the scheme prepared by the Strike Committee is fair and reasonable. (*b*) Whether the Seventeen Demands advanced by the Strike Committee are fair and reasonable and to what extent, if any, they should be met. (*c*) Whether the Standing Orders for operatives as amended and presented by the Millonwers' Association on the 4th October 1928 are fair and reasonable. The total time loss to the textile industry on account of this strike amounted to nearly 22 million working-days and the loss in wages to the labourers is calculated approximately at 3½ crores of rupees. The Bombay Strike Enquiry Committee completed the major portion of their labours by the close of the year 1928 and their Report, which is expected to be published early in 1929, will be of considerable interest.

The complete stoppage of work in the **Tata Iron and Steel Works at Jamshedpur** had its beginnings in smaller departmental strikes which tended considerably to disorganise the efficient working of the whole plant. The grievances of the men were represented by the President of the Jamshedpur Labour Association to the management who agreed to give a careful consideration to all of them . On the 12th April the Directors of the Tata Iron and Steel Company announced the introduction of a profit sharing scheme for their workers to be brought into force with effect from the beginning of April. About ten lakhs of rupees out of the profits, were proposed to be distributed to the workers by way of an annual bonus according to the monthly production. Mr. C. F. Andrews, welcomed this scheme and hoped that the announcement would do much to allay the labour unrest at Jamshedpur. The management issued a circular to all heads of departments clearly explaining their policy with regard to increments in wages, reduction of staff, standardisation of rates, introduction of grade system and labour organisation in the Works. The operatives of the Sheet Mill stopped work on the 18th April and those of the Boiler Department on the 20th April, stating that their grievances, which had been submitted to the management, remained unredressed. Some workers of the Blast Furnace Department also suspended work on the 26th April. As a result of these departmental strikes, the management, declared a lock-out with effect from the 1st May. The strikers followed the lead of Mr. Maneck Homi, an ex-employee, of the Company and a practising pleader in Jamshedpur and refused to accept the mediation of the Labour Association. The management, however, refused to negotiate with anyone who was not connected with the recognised Labour Association.

On the 3rd May, about 250 men of the permanent way section of the traffic department struck work. The strikers practised *hartals* on the 25th May and again on the 1st and the 2nd June. Consequently, the management closed the works until further notice. Essential services were however maintained with the help of loyalist workers. On the 19th June, Mr. Homi formulated the demands which should

form the basis of negotiations. The main demands were that the dismissed men should be reinstated without break of service, and that the policy of retrenchment should immediately be stopped. The Company however, propose to bring into force the bonus scheme, explained the necessity for retrenchment of staff and pointed out that no pay would be given for the strike period. Vigorous picketing was carried on and loyalist workers were assaulted. The lock-out was lifted on the 16th July but this had no effect on the strikers who still remained out. The management modified the terms of settlement formerly proposed by them and appealed to the strikers to give earnest reconsideration to the new proposals. The strikers, however, rejected the proposals and prepared to carry on still more vigorous picketing. By the end of August the situation reached a stage of complete deadlock. Mr. S. C. Bose, visited Jamshedpur and supported the cause of the strikers. He was made the President of the Labour Association in the absence of Mr. Andrews. Discussions between Mr. Bose and the Directors of the Company took place from the 2nd to 5th September and, as a result, a settlement of the dispute was arrived at. The terms of the settlement included the reinstatement of all men subject to certain exceptions, the postponement of the retrenchment scheme for twelve months, and the acceptance of the bonus scheme by the workers who should waive their claim for strike pay or lock-out wages. Seventy per cent. of the workers resumed work on the 13th September and the rest followed within the next few days.

Strike on the South Indian Railway.— The labour troubles on the S. I. Railway during the year 1928 occurred owing to a policy of retrenchment adopted by the Railway administration as the result of the recommendations made by Sir Vincent Raven's State Railways Workshops Committee, appointed in the year 1926, to enquire into matters connected with the mechanical departments of the State Railways of India. New central workshops with up-to-date machinery and labour-saving devices were built at Golden Rock, near Trichinopoly, and it was proposed to transfer the workshops at Negapatam, Podanur, and Trichinopoly to Golden Rock. Certain methods of retrenchment which were proposed did not find favour with the workers. The Government of India therefore appointed a Committee to enquire into the question generally. The Committee agreed with the proposals of the Agent, S. I. Railway for retrenchment and recommended liberal terms for those whose services would not be required. The total number of hands to be retrenched was 3,171, and the management stated that, if, as a result of voluntary resignations by employees, the necessary retrenchment was not effected, retrenchment by selection would be adopted. The selection was to be made on the basis of three Tests: Service Test, Trade Test, and Medical Test. The men were not agreeable to this proposal and several of them refused to submit to the Tests imposed. During the last three days of June 1928, the workshops staff at Golden Rock, Negapatam and Podanur observed *satyagraha*. As a result, the Agent declared a lock-out in those shops until further notice.

In order to enforce the demands of the men the Central Committee of the S. I. Railway Labour Union organised a general strike which began at mid-night on the 19th July. The total number of men affected was 17,376. The strikers obstructed the passage of trains, looted station premises, damaged signals and other property of the Railway and caused derailment of certain trains. As a result, the train service was disorganised and the Police had to escort the few trains that were running. Owing to the seriousness of the situation, District Magistrates were empowered by Government to use emergency powers and processions and meetings of strikers were prohibited. Two Communists and certain other leaders who were mainly responsible for the general strike were arrested. From the 23rd to the 27th July most of the line staff and menials resumed duty. As the chief promoters of the strike were arrested, the S. I. Railway Strike Committee called off the strike with effect from the 30th July. The workshops at Golden Rock and Podanur were reopened on the 31st July and the situation became normal by the 1st August. About 5,000 men tendered their resignations in order to avail themselves of the special benefits of double gratuity offered by the Agent to those who voluntarily resigned. Of these, many were subsequently re-engaged in addition to new hands. This strike ended by the unconditional resumption of work by the strikers. The men not only lost their pay for the period of the strike but the official recognition of their Union was also withdrawn by the Agent.

Strike on the East Indian Railway.— The dispute in the E. I. Railway Workshops at Lillooah arose over the question of reinstatement of certain dismissed men. As the management did not accede to the request of the men, about 10,000 workers struck work on the 5th March 1928 and put up additional demands regarding increases in wages, better leave rules, etc. In a communique, dated 6th March, the Agent E. I. Railway, explained to the strikers that there was no justification for any increase in their present wages. As the men did not resume work, the Agent declared a lock-out on the 8th March. The E. I. Railway Labour Union organised vigorous picketing and as a result of the intimidation by the strikers, the workers in some other departments of the Railway, and in some of the larger Engineering Workshops in Calcutta could not attend work. Efforts were also made to bring about a general strike over the whole line and demonstration marches were organised for the purpose. Some workers at Asansol and Ondal thus struck work. The strikers obstructed the passage of trains and traffic on the public roads. In view of the threatening attitude of the men, the Commissioner of Police issued orders prohibiting the taking out of processions or uttering public cries by the strikers and their leaders. The Agent tried to reopen the workshops from the 25th May but could not succeed, as the men, when once in, began to practise *satyagraha*. Negotiations for a settlement were carried on intermittently both by the Labour Union and certain members of the public but with no effect. The wreck of the E. I. Railway Express train to Gaya at Belur due to the sabotage of the strikers on the 8th July, resulted in the strikers

losing the sympathy of the public. On account of this, and owing to the promise of the Agent to consider the men's grievances if they resumed work immediately, the strike was called off on the 10th July by the E. I. Railway Labour Union and the majority of the strikers resumed work by the 13th July after the strike had lasted for a little more than four months.

CONCILIATION AND ARBITRATION.

Of recent years much attention has been paid to the settlement of industrial disputes. The baffling character of such disputes is that they are so often sporadic, breaking out without warning, grievances being formulated after striking instead of before. When such strikes occur there is no organised body of workers with whom to negotiate. The Government of Bengal took the leading part and in March 1921 appointed a committee which laid stress on the value of Works Committees and favoured the institution of Conciliation Courts to deal with disputes in public utility services. It also favoured the appointment of a panel on which the Local Government could draw when constituting a Board to enquire into any dispute. The Bombay Government, which had already explored the ground informally, appointed a similar committee in November 1921, which reported in February 1922.

TRADE DISPUTES LEGISLATION.

The history with regard to the proposals for legislation providing machinery for the prevention and settlement of industrial disputes in India covers a period of about 10 years. The considerable industrial unrest in the Bombay Presidency during the three years 1918 to 1921 led to a resolution being moved in the Bombay Legislative Council for the appointment of a committee "to consider and report on the practicability or otherwise of creating machinery for the prevention and early settlement of industrial disputes." The Government of Bombay in pursuance of their acceptance of this resolution appointed a representative committee under the chairmanship of Sir Stanley Reed. The Bombay Industrial Disputes Committee published a report during the year 1922 and recommended legislation on the lines of the British Industrial Courts Act, 1919, for the creation of Industrial Courts for the Bombay Presidency. The main difference between the British Act and the proposals of the committee was that, whereas the former provided for a permanent industrial court, the latter suggested that provision should be made for the constitution of *ad hoc* courts. No action was taken on the recommendation of the committee till the year 1924 when the Government of Bombay published their Bill to provide for enquiry into the settlement of trade disputes. This Bill provided for Courts of Enquiry and for arbitration by one or more persons. The members of the Courts of Enquiry and Boards of Arbitration were to be appointed by the Governor in Council, but in the case of the chairman of boards of arbitrators a panel was to be constituted. The Bombay Bill was a very simple measure and its main clauses were framed more or less on lines similar to those in the Industrial Courts Act, 1919.

The Government of Bombay did not proceed with their Bill in view of the fact that the Government of India circulated a draft Bill which they proposed to introduce in the Legislative Assembly for the whole of India, in August 1924. This Bill was very wide and comprehensive in scope and extent. It covered all workmen including the employees of the Government of India and of any Local Government. An important distinction was made in the general body of workmen by dividing them into employees in public utility services and other employees. In the case of public utility services and in those services to be specially notified as such by the Governor-General in Council, it was provided that it would not be lawful for any employer to declare or enforce a lock-out or for any workman to take part in a strike on account of any disputes, unless due notice of the proposed lock-out or strike was sent to the prescribed officer. Such strikes or lock-outs were not permitted until the expiry of 30 days after notice had been served in cases where no order had been made for the reference of the dispute to a board ; and until the expiry of 90 days after notice had been served, in cases where such an order had been made or until the expiry of seven days after the publication of a report by a board, whichever of the two dates might be earlier. There was no separate provision in the Bill for courts of enquiry or boards of arbitration or conciliation. The functions of these two separate institutions in the industrial disputes legislation were vested under the Government of India Bill in one body which was to be called the Board of Investigation and Conciliation. The members of a board were to be selected from permanent panels of (1) Representatives of employees ; (2) Representatives of employers ; and, (3) persons to be appointed as chairmen. Both the Government of India and each Local Government were to form their own panels. The functions of these boards were to endure to bring about a settlement of any dispute by thorough investigation of the circumstances and causes of each dispute. Nothing further was heard about this Bill till the end of 1925 when His Excellency the Viceroy in a speech at the annual meeting of the Associated Chambers of Commerce of India and Ceylon at Calcutta said: "The question of providing means of conciliation of trade dispute has been thoroughly explored but it would be premature to legislate on this question until the Trade Union Bill has become law." The Trade Unions Act was passed in the Legislative Assembly in March 1926 and was brought into operation with effect from 1st June 1927.

In August 1928, the Government of India published their second Bill making provision for the investigation and settlement of trade disputes and for certain other purposes. This bill was introduced in the Legislative Assembly for a motion for circulation on the 21st September 1928. The present Bill differs in several important respects in comparison with the Government of India's original Bill of 1924. The main part of the bill falls into three parts.

Clauses 3 to 14 relate to the establishment of tribunals for the investigation and settlement of trade disputes. This part of the Bill is based generally on the British Industrial Courts Act of 1919, and its detailed provisions are adopted for the most part from clauses in that Act. The main difference is that, whereas the British Act sets up a Standing Industrial Court, the Conciliation Boards which the Bill proposes to establish are intended to be appointed *ad hoc* like the Courts of Inquiry, in order to deal with particular disputes. The object of Courts of Inquiry which will ordinarily be composed of persons having no direct interest in the dispute will be to investigate and report on such questions connected with the dispute as may be referred to them. The objects of Boards of Conciliation, which will ordinarily include representatives of the parties to a dispute, will be to secure a settlement of the dispute. Both Courts of Inquiry and Boards of Conciliation will be able to enforce attendance of witnesses and the production of documents, and their reports are to be published. Neither party will be under any obligation to accept the finding of the Court or the advice of the Board ; and in cases where the dispute is not brought to an end during the deliberations of the tribunal that has been appointed, reliance is placed on the force of public opinion which will be enabled by the publication of the report of the tribunal to arrive at just conclusions on the merits of the dispute.

The second part of the Bill consists of clause 15 which relates to public utility services. " Public Utility Services " is defined in clause 2 (*f*), and in accordance with this definition, clause 15 is only applicable to such railway services as have been notified by the Governor General in Council. The clause makes it a penal offence for workers employed on monthly wages in public utility services to strike without previous notice, and also provides heavier penalties for persons abetting such an offence. The clause is based on the principle that persons whose work is vital to the welfare of the community generally should not be entitled to enter into a strike before sufficient time has been given to examine the merits of their grievances and to explore the possibilities of arriving at a peaceful settlement. Provisions of a somewhat similar type already exist in the Indian Post Office Act and in a number of Municipal Acts in India, and the principle is one which is widely accepted in other countries.

Clauses 16 to 20 contain certain special provisions relating to illegal strikes and lock-outs. These clauses follow closely the provisions of sections 1, 2 and 7 of the British Trade Disputes and Trade Unions Act, 1927. They are applicable only in the case of strikes and lock-outs which satisfy both of two conditions ; in the first place, the strike or lock-out must have other objects than the mere furtherance of a trade dispute within the industry to which the strikers or employers belong, and, in the second place, the strike or lock-out must be designed to cœrce Government either directly or by inflicting hardship on the community. If these conditions are satisfied, the strike or lock-out becomes illegal. Persons furthering the strike or lock-out are liable to punishment and are deprived of the protection granted to them by the Indian Trade Unions Act, while persons refusing to take part in it are protected from trade union disabilities to which they might otherwise be subjected.

The motion for circulation was adopted in the Legislative Assembly and the Bill was circulated to all Local Governments for opinion. The Government of India propose to introduce the Bill in the budget session of the Legislative Assembly early in 1929.

TRADE UNION LEGISLATION.

In March 1921, Mr. N. M. Joshi, M.L.A., moved a Resolution in the Legislative Assembly recommending that steps should be taken to provide legislation for the registration of Trade Unions and for the protection of Trade Unions. In September 1921, the Government of India addressed all Local Governments for their views, after consulting the interests concerned, on the question of the principle of such legislation and with regard to the form which it should take. On receipt of their replies, a Bill was drawn up and this was again circulated for opinion. The Bill to provide for the Registration of Trade Unions and in certain respects to define the Law Relating to Registered Trade Unions in British India was introduced in the Simla Session of the Legislative Assembly on the 31st August 1925 and was referred to a Select Committee. It was passed by the Legislative Assembly on the 8th February and by the Council of State on the 25th February and received the assent of the Governor-General on the 25th March 1926. The Trade Union Act was brought into force on 1st June 1927. Mr. N. M. Joshi introduced in the Legislative Assembly on the 9th February 1928, a Bill to amend Section 43 of the Indian Penal Code in order to extend to the officers and members of unregistered Trade Unions the protection afforded by Section 17 of the Indian Trade Unions Act, 1926, which lays down that ' no officer or member of a registered Trade Union shall be liable to punishment under sub-section (2) of section 120B of the Indian Penal Code, in respect of any agreement made between the members for the purposes of furthering any such object of the Trade Union as is specified in section 15, unless the agreement is an agreement to commit an offence.' The Assembly, however threw out the Bill.

The following paragraphs give the more important provisions of the Act :—

DEFINITIONS.

Registrar.—"Registrar" means a Registrar of Trade Unions appointed by the Local Government under section 3, and "the Registrar," in relation to any Trade Union, means the Registrar appointed for the province in which the head or registered office, as the case may be, of the Trade Union is situated.

Trade Dispute.—"Trade Dispute" means any dispute between employers and workmen or between workmen and workmen, or between employers and employers which is connected with the employment or non-employment, or the terms of employment or the conditions of labour, of any person, and 'workmen" means all persons employed in trade or industry whether or not in the employment of the employer with whom the trade dispute arises.

Trade Union.—"Trade Union" means any combination, whether temporary or permanent, formed primarily for the purpose of regulating the relations between workmen and employers or between workmen and workmen, or between employers and employers, or for imposing restrictive conditions on the conduct of any trade or business and includes any federation of two or more Trade Unions.

REGISTRATION.

Mode of Registration.—Any seven or more members of a Trade Union may, by subscribing their names to the rules of the Trade Union and by otherwise complying with the provisions of this Act with respect to registration, apply for registration of the Trade Union under this Act.

Provisions to be contained in the Rules of a Trade Union.—A Trade Union shall not be entitled to registration under this Act, unless the executive thereof is constituted in accordance with the provisions of this Act, and the rules thereof provide for the following matters, namely :—

(*a*) the name of the Trade Union ;

(*b*) the whole of the objects for which the Trade Union has been established ;

(*c*) the whole of the purposes for which the general funds of the Trade Union shall be applicable, all of which purposes shall be purposes to which such funds are lawfully applicable under this Act ;

(*d*) the maintenance of a list of the members of the Trade Union and adequate facilities for the inspection thereof by the officers and members of the Trade Union ;

(*e*) the admission of ordinary members who shall be persons actually engaged or employed in an industry with which the Trade Union is connected, and also the admission of the number of honorary or temporary members as officers required under section 22 to form the executive of the Trade Union ;

(*f*) the conditions under which any members shall be entitled to any benefit assured by the rules and under which any fine or forfeiture may be imposed on the members ;

(*g*) the manner in which the rules shall be amended, varied or rescinded ;

(*h*) the manner in which the members of the executive and the other officers of the Trade Union shall be appointed and removed ;

(*i*) the safe custody of the funds of the Trade Union, an annual audit, in such manner as may be prescribed, of the accounts thereof and adequate facilities for the inspection of the account books by the officers and members of the Trade Union ; and

(*j*) the manner in which the Trade Union may be dissolved.

Cancellation of Registration.—A certificate of registration of a Trade Union may be withdrawn or cancelled by the Registrar—

(*a*) on the application of the Trade Union to be verified in such manner as may be prescribed, or

(*b*) if the Registrar is satisfied that the certificate has been obtained by fraud or mistake, or that the Trade Union has ceased to exist or has wilfully and after notice from the Registrar contravened any provisions of this Act or allowed any rule to continue in force which is inconsistent with any such provision, or has rescinded any rule providing for any matter provision for which is required by section 6 :

Provided that not less than two months' previous notice in writing specifying the ground on which it is proposed to withdraw or cancel the certificate shall be given by the Registrar to the Trade Union before the certificate is withdrawn or cancelled otherwise than on the application of the Trade Union.

RIGHTS AND LIABILITIES OF REGISTERED TRADE UNIONS.

Objects on which General Funds may be spent.—The general funds of a Trade Union s hall not be spent on any other objects than the following, namely :—

(*a*) the payment of salaries, allowances and expenses to officers of the Trade Union ;

(*b*) the payment of expenses for the administration of the Trade Union, including audit of the accounts of the general funds of the Trade Union ;

(*c*) the prosecution or defence of any lega proceeding to which the Trade Union or any member thereof is a party, when such prosecution or defence is undertaken for the purpose of securing or protecting any rights of the Trade Union as such or any rights arising out of the relations of any member with his employer or with a person whom the member employs ;

(*d*) the conduct of trade disputes on behalf of the Trade Union or any member thereof ;

(*e*) the compensation of members for loss arising out of trade disputes ;

(*f*) allowances to members or their dependants on account of death, old age, sickness, accidents or unemployment of such members ;

(*g*) the issue of, or the undertaking of liability under policies of assurance on the lives of members, or under policies insuring members against sickness; accidents or unemployment ;

(*h*) the provision of educational, social or religious benefits for members (including the payment of the expenses of funeral or religious ceremonies for deceased members) or for the dependants of members ;

(*i*) the upkeep of a periodical published, mainly for the purpose of discussing questions affecting employers or workmen as such ;

(*j*) he payment, in furtherance of any of the objects on which the general funds of the Trade Union may be spent, of contributions to any cause intended to benefit workmen in general, provided that the expenditure in respect of such contributions in any financial year shall not at any time during that year be in excess of one-fourth of the combined total of the gross income which has up to that time accrued to the general funds of the Trade Union during that year and of the balance at the credit of these funds. at the commencement of that year ; and

(*k*) subject to any conditions contained in the notification, any other object notified by the Governor-General in Council in the *Gazette of India.*

Constitution of a separate Fund for Political purposes.—(1) A registered Trade Union may constitute a separate fund, from contributions separately levied for or made to that fund, from which payments may be made, for the promotion of civic and political interests of its members, in furtherance of any of the objects specified in sub-section (2).

(2) The objects referred to in sub-section (1) are :—

(*a*) The payment of any expenses incurred, either directly or indirectly, by a candidate or prospective candidate for election as a member of any legislative body constituted under the Government of India Act or of any local authority before, during or after the election in connection with his candidature or election ; or

(*b*) the holding of any meeting or the distribution of any literature or documents in support of any such candidature or prospective candidature ; or

(*c*) the maintenance of any person who is a member of any legislative body constituted under the Government of India Act or of any local authority ; or

(*d*) the registration of electors or the selection of a candidate for any legislative body constituted under the Government of India Act or for any local authority ; or

(*e*) the holding of political meetings of any kind, or the distribution of any political literature or political documents of any kind.

(3) No member shall be compelled to contribute to the fund constituted under sub-section (1) ; and a member who does not contribute to the said fund shall not be excluded from any benefits of the Trade Union or placed in any respect either directly or indirectly under any disability or at any disadvantage as compared with other members of the Trade Union (except in relation to the control or management of the said fund) by reason of his not contributing to the said fund ; and contribution to the said fund shall not be made a condition for admission to the Trade Union.

Criminal Conspiracy in Trade Disputes—No officer or member of a registered Trade Union shall be liable to punishment under sub-section (2) of section 120-B of the Indian Penal Code, in respect of any agreement made between the members for the purpose of furthering any such object of the Trade Union as is specified in section 15, unless the agreement is an agreement to commit an offence.

Immunity from Civil Suit in certain Cases—(1) No suit or other legal proceeding shall be maintainable in any Civil Court against any registered Trade Union or any officer or any member thereof in respect of any act done in comtemplation or furtherance of a trade dispute to which a member of the Trade Union is a party on the ground only that such act induces some other person to break a contract of employment, or that it is in interference with the trade, business or employment of some other person to dispose of his capital or of his labour as he wills

(2) A registered Trade Union shall not be liable in any suit or other legal proceeding in any civil court in respect of any tortious act done in contemplation or furtherance of a trade dispute by an agent of the Trade Union if it is proved that such person acted without the knowledge of, or contrary to express instructions given by, the executive of the Trade Union.

Proportion of Officers to be connected with the Industry.—Not less than one-half of the total number of the officers of every registered Trade Union shall be persons actually engaged or employed in an industry with which the Trade Union is connected:

Provided that the Local Government may by special or general order, declare that the provisions of this section shall not apply to any Trade Union or class of Trade Unions specified in the order.

Returns.—(1) There shall be sent annually to the Registrar, on or before such date as may be prescribed, a general statement, audited in the prescribed manner, of all receipts and expenditure of every registered Trade Union during the year ending on the 31st day of March next preceding such prescribed date, and of the assets and liabilities of the Trade Union existing on such 31st day of March. This statement shall be prepared in such form and shall comprise such particulars as may be prescribed.

(2) Together with the general statement there shall be sent to the Registrar a statement showing all changes of officers made by the Trade Union during the year to which the general statement refers, together also with a copy of the rules of the Trade Union corrected up to the date of the despatch thereof to the Registrar.

(3) A copy of every alteration made in the rules of a registered Trade Union shall be sent to the Registrar within fifteen days of the making of the alteration.

Under the powers conferred on them by Section 29 of the Indian Trade Unions Act, 1926, the Local Governments framed regulations for the purpose of carrying into effect the provisions of the Act. The Regulations prescribed various Forms for notices to be given and returns to be submitted to the Registrar. Detailed provisions were made with regard to the qualifications of the auditors who were to audit the accounts of different classes of registered Trade Unions. In addition, the fees payable for registration of Unions, of changes in rules and for inspection of documents and the Register of Trade Unions were also prescribed.

The first Annual Reports submitted by the Local Governments to the Government of India on the working of the Trade Unions Act, 1926, were for the year ending the 31st March 1928. The Report for the Bombay Presidency shows that 12 Trade Unions with a total membership of 52,559, as at 31st March 1928, were registered under the Act during the year under report. None of these Unions maintained a Political Fund. The aggregate closing balance of the Unions amounted to nearly Rs. 1½ lakhs whereas the actual assets of the Unions, *excluding* unpaid subscriptions due, amounted to about Rs. 84,000.

As a result of the recognition by the employers, of the special status of Trade Unions registered under the Act, several Unions revised their constitutions to suit the requirements of the Act and sought registration. By the end of the year 1928, altogether 31 Trade Unions in the Bombay Presidency had been registered under the Act.

WORKMEN'S COMPENSATION.

The Workmen's Compensation Act of 1923 received the assent of the Governor-General on the 5th March 1923. The Act extends to the whole of British India including British Baluchistan and the Sonthal Parganas and came into force on the first day of July 1924. The original Bill contained two distinct parts Chapter II which lay outside the general scheme for compensation, contained provisions modifying the ordinary law in respect of employers' liability and making it easier for injured workmen to sue their employers for damages in the Civil Courts. These clauses applied only to workmen, who come under the workmen's compensation provisions, so that, although they omitted the limit to damages which governs their counterpart in England, they were not likely to be much used. This Chapter II was deleted from the measure by the Legislative Assembly. Ten classes of workmen are covered by the Act. Some of these, such as members of fire brigades, telegraph and telephone linesmen, sewage workers and tramwaymen, are small, and as the definition of seaman is limited to those employed on certain inland vessels, only a very small proportion of Indian seamen will benefit by the bill. The five important classes are the workers in factories, mines, docks and on railways, practically all of whom are included, and those engaged in certain types of building work, notably the construction of industrial and commercial buildings, and any other buildings which run to more than one storey. The most important classes excluded altogether are agricultural workers and domestic servants. Non-manual labourers getting more than Rs. 300 a month are excluded, except on the railways. Power is taken to include other hazardous occupations by notification from time to time. All occupations involving blasting operations were thus proposed to be declared by the Governor-General in Council, as hazardous occupations *vide* notification by the Government of India, Department of Industry and Labour, No. L-1440 dated the 9th February 1928. Compensation is to be given, as in the English Act, for personal injury by accident arising out of and in the course of employment. It is also to be given for diseases in certain cases. The provisions for diseases have been so framed that if a certain class of workmen contracts a scheduled disease, it will usually be extremely difficult for the employer to defeat a claim for compensation. On the other hand, other workmen will find it equally difficult to get compensation for disease, as they will have to prove that the disease arises "solely and directly" from the employment. The diseases scheduled at present are anthrax, lead poisoning and phosphorus poisoning. Whether compensation can be claimed for diseases other than those scheduled is doubtful, but the list is made capable of extension. Mercury poisoning was thus added to Schedule III by notification, dated 28th September 1926.

Scales.—The scales for compensation are generous, they are based on the unanimous recommendation of a Committee which met in June. Adults (*i.e.*, persons not under the age of 15) and minors are distinguished throughout and compensation is subject to upper limits in every case. For death the relatives receive 30 months' wages of the deceased workman, subject to a maximum of Rs. 2,500 if he was an adult. For a minor who is killed, the compensation payable is the fixed sum of Rs. 200. If a workman is completely disabled for life, he gets 42 months' wages if he is an adult and 84 months' wages if he is a minor, subject in each case to a maximum of Rs. 3,500. If he sustains permanent injuries that do not completely disable him, he gets proportions of the above sums, and for certain clearly recognizable injuries, like the loss of limb, these proportions are specific. Thus a workman, who lost his right arm below the elbow would receive 60 per cent. of the sums specified above, subject to a maximum of Rs. 2,100. If his pay was Rs. 30 monthly, the sum would come to Rs. 756. All these payments are lump sums. Of much greater importance are the provisions for the minor and more common injuries. Statistics based on experience of industry generally in other countries indicate that 50 per cent. of injuries from accidents cause disablement for not more than ten days, 44 per cent. cause disablement lasting more than 10 days, but ultimately disappearing, 5 per cent. result in permanent injuries and 1 per cent. end fatally. A large proportion of cases will be excluded by the provision that no compensation is to be paid on account of the first ten days of disablement. The great majority of the remaining cases will fall under the scale for temporary disablement. The rate of payment for temporary disablement is half wages for adults and two-thirds wages for minors, subject to a maximum of five years, and for minors, two-thirds wages or whole monthly wages after they have attained the age of 15 years, subject in each case to a maximum amount of Rs. 30, and to a maximum period of 5 years. This maximum of 5 years is not of great importance, as experience shows that the number of such cases which last more than six months is insignificant. During the first six months of these payments they can only be commuted to a lump sum if both parties agree; after payments have gone on for six months, either party can apply for commutation. In its treatment of the difficult question of dependents the Indian Act allows only husbands and wives, parents and minor children to claim compensation, and it makes the compensation a fixed sum independent of the number of those relations. The administration of the Act and the settlement of disputes is entrusted to special Commissioners, with a very simple procedure wide powers and restricted opportunities for appeals.

Only two Provinces—Bengal and Bombay—have so far appointed full-time Commissioners. The full-time Commissioner in the Bombay Presidency has an immediate jurisdiction extending over Bombay City, the Bombay Suburban District, the Districts of Ahmedabad, Broach, Surat, Khandesh and Sholapur and the areas occupied by the Hydro-Electric Companies managed by Messrs. Tata Sons Ltd., and by the G. I. P. and the B. B. & C. I. Railway lines coming within the Bombay Presidency. In the Madras Presidency, the Labour Commissioner is also the Commissioner for workmen's compensation. In the other Provinces and in the Districts of Bengal and Bombay which are not under the jurisdiction of the Provincial full-time Commissioners, the District Magistrates and Subordinate Judges have been appointed ex-officio Commissioners.

The Annual Report on the working of the Workmen's Compensation Act for the whole of India during the year 1926 shows that workmen are availing themselves of the benefits of the Act to an increasing extent. The number of cases in which compensation was paid in 1926 was 14,096 as against 11,371 in 1925 and the total amount paid was Rs. 821,475-10-11 as against Rs. 644,120-6-6. In Bengal and Bombay the larger employers of labour are insuring their liabilities to an increasing extent with insurance Companies and this has facilitated to a considerable extent the settlement of claims under the Act. Labour organisations are also taking an increasingly active part in furthering the claims of their members but their activities in this direction are still inadequate for the needs of the workpeople in the country.

The total number of applications filed under section 10 (for the award of compensation) was 379 as against 284 in 1925, the increase being most marked under permanent disablement. There was also a marked increase in the number of contested cases and in the number of cases that were dismissed by the Commissioners for Workmen's Compensation. The number of applications for the registration of agreements was 610 as against 427 in 1925. Of this number only 2 were not registered on account of the inadequacy of the amount of compensation offered. It is satisfactory to note that in the majority of cases compensation was paid without the intervention of the Commissioner. Over 14,000 persons are reported to have received compensation in 1926 and the total number of applications filed for the award of compensation was only 379.

During the year there were 7 appeals (including one revision petition) to the High Court. Of these 5 were disposed of during the year and 2 were pending at its close. There was also one reference made to the High Court under section 27 of the Act.

The Workmen's Compensation Act, 1923, was amended during the year under report in order to bring the Indian law into conformity with the provisions of the Draft Convention concerning Workmen's Compensation for Occupational Diseases adopted at the Seventh International Labour Conference held at Geneva in 1925. This Convention has been ratified by India and the necessary changes were made in sub-section (2) of section 3 and in the list of occupational diseases given in Schedule III of the Act. Certain occupations in connection with operations for winning natural petroleum or natural gas and in connections with the loading, unloading and fuelling of a ship in any harbour, roadstead or navigable water were also brought within the purview of the Act by notification issued by the Governor-General in Council in exercise of the powers conferred by sub-section (3) of section 2 of the Act.

So far the administration of the Act has given rise to remarkably little difficulty, but it is still premature to say that the endeavours made to meet the peculiar conditions in India have been completely successful, as full use is not yet being made of the Act. The Workmen's Compensation Act, 1923, came into force on the 1st July 1924. Since then a number of amendments have suggested themselves or have been proposed by Commissioners for Workmen's Compensation and Local Governments. Some of the latter proposals involve the modification of the principles underlying the present Act or of its more important features. So far as these are concerned, the Government of India consider it advisable to consult Local Governments and the public generally before forming conclusions. The revision of the Act so as to amend those sections or parts of sections which are admittedly defective and the introduction of changes which are likely to raise no important controversial points and which will be generally recognised as improvements are now engaging the attention of the Government of India.

Proposed Labour Legislation.

Largely as a result of the demands of Labour in Indian Legislatures, in the Press and elsewhere, the Government of India have at present under comtemplation the provision of legislation (1) for defining the limits within which wages must be paid; and (2) for the regulation of Deductions made from Wages or Payments in respect of Fines.

The Prompt Payment of Wages.

In September 1924, the Government of India requested all Local Governments to furnish particulars regarding the periods by which wages are paid in organised industries and the delays which are associated with their payment. The results of the enquiry for the Bombay Presidency were published in the issue of the *Labour Gazette* for January 1925 and for all India in a special bulletin issued by the Department of Industries and Labour—Bulletin No. 34, 'Periods of Wage Payment.' The information collected revealed a state of affairs which could not be regarded as other than unsatisfactory. The delays which elapse between the end of the period by which wages have been earned and the date on which they are paid were found to be longer than is usual in industries in other countries, and, in a number of cases, were so great as to add appreciably to the economic difficulties of the workers.

In July 1926, the Government of India addressed all Local Governments for their views, after consulting the interests concerned, on the provisional proposals drawn up with regard to the form which the legislation for the control of this matter should take. It was pointed out that systematic delays in payment are particularly associated with payments on a monthly basis—a month being the period most commonly employed for the calculation of wages. It is no uncommon thing—in fact, it appears to be the rule in certain industries for monthly wages to be systematically withheld until a fortnight after the close of the month to which they relate, and cases have been reported where wages had been withheld for considerably longer periods. It was suggested to the Government of India that, as the evil is particularly associated with monthly payments, employers should be compelled to adopt shorter periods of wage payments. This was one of the arguments put forward in support of Diwan Chaman Lal's Weekly Payments Bill. This Bill when it was referred to Local Governments for consideration met with such general opposition that the Government of India were compelled to oppose its consideration in the Legislative Assembly. The Government of India do not think that any Bill of this kind is likely to receive the support of public opinion or to prove effective in its operation; but, whilst not accepting the view that the general system of monthly payments is a satisfactory one, they recognise that if the abuses referred to can be checked or eliminated by legislation it is the duty of Government to introduce such legislation.

The scheme outlined proposes to set statutory limits to the time within which wages must be paid. In the case of monthly workers the limit proposed is seven days, for fortnightly workers four days, for weekly workers two days and for daily workers one day. It is suggested that it should be left to the employers subject to the approval of the Local Government, to fix the date on which the month should commence. The difficulties arising out of the fact that in some cases when wages are paid at piece rates intricate valuations may be required to calculate wages are proposed to be met by prescribing that, in such cases, the payment, within the statutory limits laid down, of seventy-five per cent, (or some higher percentage) of the wages earned should constitute compliance with the law. It is further proposed that the measure, in the initial stages, should be confined only to such establishments as are covered by the Indian Factories Act and the Indian Mines Act, and that the enforcement of the measure should rest with the inspection staff of the Factories and the Mines Departments through some form of summary procedure.

Regulation of Deductions from Wages for Fines.

In June 1926, the Government of India requested all Local Governments to procure information on the extent of the practice in India by which employers in industrial concerns are empowered to inflict fines upon their workmen. Suggestions have been made in the Central Legislature, in the Press and elsewhere that the system of inflicting fines upon workmen is common in Indian industrial establishments, and that it constitutes an evil of such proportions that steps should be taken either to abolish the system altogether or to reduce it to such dimensions as to prevent abuse.

The experience of Western countries with regard to the subject has in many cases led to more or less elaborate legislation on the subject. The main provisions of the English Law are contained in the Truck Act of 1896. In several other countries the power to impose fines and make deductions from wages is regulated by law. Sometimes a limit in the shape of a maximum percentage of wages is imposed; generally, deductions can only be made in accordance with a code of regulations duly posted in the factory or other establishment; and frequently the law contains the statutory provision that sums paid as fines must be credited to funds devoted in some manner or other to the benefit of the workers.

The Government of India have not at present sufficient information at their disposal regarding the degree to which the system of imposing fines is prevalent in India, the forms which it takes, or the extent, if any, to which it is in practice abused to enable them to form any definite conclusions. The object of the enquiry is to ask Local Governments to furnish them with such information as they are able to collect on the subject, after consultation with the interests concerned, and to favour them with their views on the desirability of aking any action, legislative or otherwise, to counter any abuses which may be found to prevail.

The Labour Office of the Government of Bombay conducted an extensive enquiry into the question and the results of its enquiry have been published in the form of a special report. Over 1,300 establishments—factories, non-factories, offices, etc.,—were covered by the Labour Office enquiry. The results show that the system of fining is general in textile mills. and fairly common in the other establishments. Rules governing the infliction of fines were found to exist mostly in the case of the textile mills and in some of the larger workshops in Bombay City. In establishments under private ownership, no limits appeared to have been prescribed with regard to the extent to which fines could be inflicted. The offences for which fines are imposed includes breaches of discipline, disobedience, bad or negligent work, loss or damage of tools or machinery, etc. Fines for late attendance are fairly general in all establishments except seasonal factories such as Gins and Presses. In Textile mills fines are also imposed for spoilt or damaged cloth. The proportion of fines to the total wages bill for a period of one year amounted to 0.39 per cent. in the case of textile mills and 0.18 per cent. in the case of other factories. Deductions from wages for supply of tools or materials were practically few whereas deductions in respect of damaged or spoilt material handed over to the workers were made by 58.3 per cent. of the Textile mills covered by the enquiry . The incidence of these deductions worked out at Rs. 3-2-4 per operative. Other deductions from wages on account of medical aid, rent for lodging, provident fund, etc., were comparatively few but the Textile Mills in Bombay and Ahmedabad made deductions in respect of interest on advances granted to their employees.

The Government of India are at present considering the replies received from Local Governments on the subject but have not yet arrived at any definite decision as to whether legislation of the type of the Truck Acts should be adopted in India.

WAGES.

In Agriculture,—There is much discussion, with no very definite conclusions, as to whether wages have kept pace with the cost of living. Conditions vary so markedly between Province and Province that it is difficult to give exact figures. Different Provincial Governments publish, from time to time, the results of Quinquennial Censuses into the wages of labourers mainly in agricultures. The Labour Office of the Government of Bombay published a Report in 1924 of an Enquiry into Wages in Agriculture which gave the average daily earnings of three classes of agricultural labour, *viz.*, skilled labour, ordinary labour, and field labour, in each of the 26 districts of the Bombay Presidency, separately for urban areas and rural areas, and for each of 23 years from 1900 to 1922. The figures for each year from 1923 to 1926 have been published in the General-Administration Reports of the Bombay Presidency. The wages prevailing in other provinces for similar types of labour do not compare unfavourably with wages in the Bombay Presidency for any particular year for which a comparison is made. This statement requires an important qualification. It is not meant that the money amounts actually paid are similar. The rates of wages in different provinces vary according to the extent of their industrialisation and money wages in Provinces which are mainly agricultural are on a lower level than the money wages in Provinces which are highly industrialised, *i.e.*, in Bombay and Bengal. There is no doubt whatever that wages have risen markedly in all parts of India from 1918 to 1926 but there is a downward tendency noticeable in mofussil wage since 1926. The general condition of the Indian labourer has nevertheless improved. The construction of a real wage index number is not always indicative of the general material condition of any group of workers. The utility of such an index number is only confined to a particular comparison with any given date and provided always that the two sets of figures showing money wages and the cost of living at two particular dates are accurately complied, the real wage index number at the later date as compared with the condition of the workman at the former date gives an accurate reading of the position of his purchasing power in comparison with that date. Indian publicists constantly aver that the condition of the Indian labourer to-day is worse than ever it was before. The true fact is that since wages and prices are both variables, "real wages" being a function of two variables, could only remain at the same level, if the two factors vary proportionately. But this does not happen and wage changes always lag behind price changes. When prices rise real wages rise only slowly to the original level, and when prices fall real wages fall slowly. Consequently the labourer is sometimes better off and sometimes worse off. Comparison of conditions in India to-day with the pre-war year shows that during this particular period the condition of the Indian labourers has undoubtedly improved. This is amply proved by the figures given below showing the index numbers of daily average wages of skilled labourers, ordinary labourers and field labourers, for urban areas and for rural areas for the Bombay Presidency.

Agricultural Wages (Nominal).

Index Numbers for the Bombay Presidency (including Sind) 1913=100.

Year.	Urban Areas.			Rural Areas.		
	Field labour.	Ordinary labour	Skilled labour.	Field labour.	Ordinary labour.	Skilled labour.
1921 ..	179	184	180	159	148	166
1922 ..	189	192	195	170	162	179
1923 ..	200	200	196	171	171	187
1924 ..	195	196	209	176	181	191
1925 ..	221	208	224	206	181	211
1926 ..	221	204	216	194	181	215
1927	200	192	211	176	176	206

The construction of accurate real wage figures to correspond with the index numbers of nominal wages given above is not possible on account of the inapplicability of any general cost of living index number for a particular group of workers in a particular centre to the Presidency as a whole.

In the Cotton Mill Industry.—An enquiry was held by the Labour Office of the Government of Bombay into Wages and Hours of Labour in the Cotton Mill Industry for August 1923 which covered a total number of 251·219 work-people in 186 mills in the Bombay Presidency and in the States within its territorial limits. The important results of this enquiry were (1) a decline in the number of children employed owing to more rigorous factory inspection under the new Factory Act, (2) an absenteeism figure as high as 10·4 per cent. for all work-people; 9·2 per cent. for men; 14·7 per cent. for women; ·98 per cent. for time workers; and 11·2 per cent. for piece-workers; (3) the average monthly earnings per head in August 1923 as compared with May 1921 were at the same level in Bombay, slightly over in Ahmedabad and lower in Sholapur, Baroda State and other Centres in the Presidency; (4) the potential monthly earnings for all work-people in the Presidency would have amounted to Rs. 32-1-0 per head per month had all work people worked for a full working month of 27 days at the rates of average daily earnings which prevailed in August 1923—the difference between this and the actual monthly earnings amounting to Rs. 3-8-0 or 12 per cent.; (5) the total Wages Bill in the cotton mill industry in August 1923 amounted to Rs. 72,22,000 for the number of work-people covered in the enquiry; (6) the average hours of labour per day amounted to 10 hours and 5 minutes for men, 9 hours and 35 minutes for women and 5 hours for half timers or children; (7) the number of holidays recommended in the Bombay Mills by the Millowners' Association during the year 1923 amounted to 57; and (8) except in Sholapur no bonuses were paid for service in the year 1923.

The following table shows the daily average earnings, per capita, of work-people in different occupations classified according to age and sex groups :—

——		Bombay City.	Ahmedabad.	Sholapur.	Baroda State.	Other Centres.
Mean—		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Jobbers	Time.	2 15 2	2 1 6	1 10 10	2 4 11	1 14 8
	Piece.	4 1 0	4 2 10	2 12 4	2 8 10	2 13 10
2 loom weavers	Piece.	1 11 3	1 10 5	1 9 4	1 5 2	1 8 2
Mule Side Piecers	Time.	1 4 9	1 1 4	0 14 5	1 0 10	0 12 4
	Piece.	1 7 2	..	..	..	1 0 7
Ring Side Piecers	Time.	1 0 4	0 15 6	0 11 1	0 12 4	0 10 7
Ring Followers	Time.	0 14 4	0 11 10	0 8 2	0 7 3	0 9 3
Rulers	Piece.	0 12 4	0 12 9	..	0 9 7	0 8 7
Winders	Piece.	0 13 4	0 13 8	0 9 8	0 10 2	0 8 8
Drawing Frame Tenters	Piece.	1 3 0	1 0 3	0 11 7	..	..
Slubbing Frame Tenters	Piece.	1 5 3	1 3 0	0 12 10	0 15 10	0 14 1
Intermediate Frame Tenters	Piece.	1 3 11	0 15 11	0 12 3	0 14 10	0 13 6
Roving Frame Tenters	Piece.	1 2 7	0 14 11	0 10 7	0 12 10	0 12 8

——		Bombay City	Ahmedabad.	Sholapur.	Baroda State.	Other Centres.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Women—						
Ring Spinning Side Piecers	Time.	0 15 2	0 14 11	0 9 10	0 13 2	0 12 8
Ring Spinning Followers	Time.	0 12 7	0 11 0	0 7 9	0 8 5	..
Rulers	Piece.	0 12 6	0 12 7	0 6 0	0 12 4	0 7 4
Winders	Piece.	0 13 3	0 11 10	0 6 6	0 7 7	0 9 1
Big Lads—*						
Ring Spinning Side Boys	Time.	0 14 2	0 12 7	0 9 9	0 5 7	0 5 7
Spinning Boys	Time.	0 11 5	0 10 11	0 8 1	0 7 8	0 8 4
Roving Frame Tenters	Time.	0 11 4	0 10 11	0 7 11	0 7 4	0 6 7
Children—						
Spinning †	Time.	0 6 10	0 5 9	0 4 8	0 4 10	0 4 5
Roving	Time.	0 6 9	0 5 9	0 5 2	0 5 0	0 4 9

* By "Big Lads" is generally meant boys between the ages of 15 and 18 but the term also includes men who are not considered as sufficiently bodied to be employed as men.

† Children are workers, boys and girls, more than 12 years and under 15 years of age.

The third Labour Office Enquiry into Wages in the Cotton Mill Industry in the Cities of Bombay, Ahmedabad and Sholapur was held in 1926 on the basis of the Muster Roll. The results of this enquiry will be published in due course.

OFFICIAL ORGANISATION.

The Government of India and several Local Govenments have set up special machinery for dealing with Labour issues, and there are Labour officers with the Governments of Bengal, Madras and Burma whilst the Bombay Government, on the advice of the informal committee whose recommendations have been mentioned above, constituted a special Labour Office in the Secretariat.

In a resolution of Government in the Home Department, dated 29th April 1921, the functions of the Labour Office in Bombay were set out as follows :—

(*i*) **Labour Statistics and Intelligence**—These relate to the conditions under which labour works and include information relating to the cost of living, wages, hours of labour, family budgets, strikes and lock-outs, and similar matters;

(*ii*) **Industrial Disputes.**—As experience and knowledge are gained and the activities of the Labour Office develop, it will promote the settlement of industrial disputes when these arise; and

(*iii*) **Legislation and other matters relating to Labour.**—The Labour Office will advise Government from time to time as regards necessary new legislation or the amendment of existing laws. The Labour Office publishes a monthly journal entitled the *Labour Gazette* which is a journal for the use of all interested in obtaining prompt and accurate information on matters specially affecting labour in India and abroad. The address of the Labour Office is :—SECRETARIAT, BOMBAY.

Director of Information and Labour Intelligence, Registrar of Trade Unions and Ag. Commissioner for Workmen's Compensation—Mr. J .F. Gennings, Bar-at-Law, J. P.

Investigators.—Mr. S. R. Deshpande, B.A., B. Litt. (Oxford); Mr. N. A. Mehrban, B.A.; (also Asst. Registrar of Trade Unions.) Mr. A. S. Rajan, B.A., LL.B.

Lady Investigators.—Mrs. K. Wagh; Miss G. Pimpalkhare; Miss S. Dabholkhar.

LABOUR ASSOCIATIONS.

ALL-INDIA TRADE UNION CONGRESS.

President.—Pandit Jawahar Nehru.

Vice-Presidents.—(1) Mr. Thengdi
(2) ,, Kulkerni

General Secretary.—Mr. N. M. Joshi, M.L.A., C/o Servants of India Society, Sandhurst Road, Bombay.

Assistant Secretaries.—(1) Mr. R. R. Bakhle.
(2) ,, S. A. Dange.

Treasurer.—Mr. F. J. Ginwalla, 123, Esplanade Road, Fort, Bombay.

CENTRAL LABOUR BOARD FOR BOMBAY.

President.—Rai Saheb Chandrika Prasad.

Vice-President.—F. J. Ginwalla, M.A., LL.B., 123, Esplanade Road, Fort, Bombay.

Hon. Gen. Secretary.—S. H. Jhabvala, B.A., 123, Esplanade Road, Fort, Bombay.

The names and addresses of the officials of other trade unions in the Bombay Presidency are published regularly every quarter by the Labour Office in the *Labour Gazette.*

Domestic Servants.

The relationship of master to servant in India is a subject to which attention is frequently directed in the Press by complaints about the alleged deterioration of domestic servants and the hardships to which employers are subjected by the boycotting action of discharged servants. The remedy most commonly propounded for misbehaviour on the part of servants is registration with a view to checking the use of false testimonials, or "chits," and to enabling masters to obtain certain information as to the character of the persons they employ. This mode of procedure is of German origin, for the old Prussian Servants' Ordinances (Gesindeordnung) were supplemented in 1854 by a law, applying only to agricultural labourers and domestic servants, which punishes breach of contract, and since then various State laws dealing with domestic servants have been passed in Germany. The conditions are not, however, analogous for the servant keeping class in India is proportionately larger than in Europe, as also is the number of servants kept by each individual.

The first attempt in the East to deal with the problem by legislation was made in **Ceylon.** The act dealing with the registration of domestic servants in that Colony is comprised in Ordinance No. 28 of 1871. It extends to all classes of domestic servants, hired by the month or receiving monthly wages, and the word 'servant' means and includes head and under-servants, female servants, cooks, coachman, horsekeepers and house and garden coolies. The Act came into operation in 1871 and empowered the Governor to appoint for the whole of the Island or for any town or district, to which the Ordinance is made applicable, a registrar of domestic servants, who is to be under the general supervision and control of the Inspector-General of Police. A registry is kept by the registrar of all domestic servants employed within his town or district, and he has to enter therein the names of all the servants, the capacities in which they are employed at the time of such registration, the dates of their several engagements and such memorandum of their previous services or antecedents as they may desire to have recorded in the register. But the registrar must, previous to his entering all these details, satisfy himself as to the credibility of the statements made to him. Any person, who may not have been a domestic servant before, but who is desirous of entering domestic service, has to submit an application to the registrar, and if the registrar is satisfied that there are reasonable grounds to believe that the applicant is a fit and proper person to enter domestic service he shall enter his name in the register, recording what he has been able to learn respecting the person's antecedents together with the names of any persons who are willing to certify as to his respectability. If the applicant is unable to produce satisfactory or sufficient evidence as to his fitness for domestic service the registrar may grant him "provisional" registration, to be thereafter converted into "confirmed" registration according to the result of his subsequent service. If the registrar is satisfied that the applicant is not a fit and proper person he should withhold registration altogether, but in such a case he must report his refusal to register to the Inspector-General of Police.

Every person whose name has been registered in the general registry is given a pocket register containing the full particulars of the record made in the general registry. No person can engage a servant who fails to produce his pocket register or whose pocket register does not record the termination of his last previous service, if any. On engaging a servant the master has to enter forthwith in the pocket register the date and capacity in which such servant is engaged and cause the servant to attend personally at the registrar's office to have such entry inserted in the general registry. Similarly, in case the master discharges a servant he must insert in the pocket register the date and cause of his discharge and the character of the servant. Provided that if for any reason he be unwilling to give the servant a character or to state the cause of his discharge he may decline to do so. But in such a case he must furnish to the registrar in writing his reasons for so refusing. If the servant on dismissal fails to produce his pocket register the master must notify that fact to the registrar. Whenever any fresh entry is made in the pocket register the servant is bound to attend the registrar's office to have such an entry recorded in the general registry. Every servant whose name is registered shall, if he subsequently enters service in any place not under the operation of the Ordinance, attend personally at the nearest police station on his entering or leaving such service and produce his pocket register to the principal officer of police at such station in order to enable the police officer to record the commencement or termination of the service. The police officer has then to communicate it to the registrar of the town or district in which such servant was originally registered.

Various **penalties of fine** as well as of imprisonment are imposed for violation of any of the acts required to be done or duties imposed by the Act on the various persons mentioned below. As respects masters if they fail to fulfil any of the duties imposed on them by the Act they expose themselves to a liability of their being fined to the extent of Rs. 20. Similarly a servant, who fails to fulfil any of the duties imposed on him by the Act is liable to pay a fine not exceeding Rs. 20. But in case he gives any false information to the registrar or to any other person on matters in which he is required by this Ordinance to give information, he is liable to a fine not exceeding Rs. 50 or to imprisonment, with or without hard labour, not exceeding 3 months. A fee of 25 cents is charged to the master on engaging a new servant, a like fee of 25 cents is charged to the servant on his provisional registration, or on registration being confirmed, or for registration of previous service or antecedents. But in case of loss or destruction of the pocket register the servant has to pay one rupee for the issue of a duplicate pocket register.

A similar Ordinance (No. 17 of 1914) has been introduced in the **Straits Settlements,** where its operation has been limited to such local areas as may be declared by the Governor in Council, and its application within such areas has been restricted to the class of householders who are expected to desire the benefit of the provisions.

Sea Routes between India and Europe.

The Indian port for the direct journey to and from Europe is Bombay. There are ordinarily five lines of steamers by which the journey to and from the West *via* Bombay can be performed, either by sea all the way, or—and in some cases only—by sea part of the way and by rail across Europe. They are the P. &. O., the Anchor Line, the City and Hall Line, the Lloyd Triestino and the British India line. The Natal line steamers are available for Western passages only, the steamers sailing round the Cape on their Eastward voyages. There are ordinarily other services between Calcutta and the West, by steamers sailing round Ceylon, and several lines connect Colombo with Europe. Of the latter the Orient, the Messageries Maritimes, the Bibby Lines, N. Y. K., Australian Commonwealth, and Royal Dutch Lines are the chief besides the P. & O. The Bibby and Henderson services extend to Rangoon. The new railway between India and Ceylon greatly increases the importance of the Colombo route for Southern India. The shortest time between London and Bombay is 15 days *via* Marseilles. The following are the fares which are convertible at approximately current rates of exchange:—

Peninsular and Oriental S. N. Co.

Fares from Bombay or Karachi.	1st Saloon.			2nd Saloon.	
	A* Rate. £	B Rate £	C Rate £	A Rate. £	B Rate. £
Free passages (single and return) are granted between Karachi and Bombay by British India Steamer.					
To Plymouth or London by sea, Single	95	85	75	63	57
„ „ Return	166	149	130	110	100
To Marseilles, Single..	87	77	67	59	53
„ Return	152	135	118	103	93
To „ Malta or Gibraltar, Single	89	79	69	61	55
„ „ Return	155	138	121	106	96
To London from Calcutta	70	..	..	56	..
Return	123	..	..	98	..

By the **British India S. N. Co.** fares to London by sea from Bombay or Madras are:—single 1st saloon £66; 2nd saloon £52. Return £116 and £91. Bombay to Marseilles £62, and 2nd saloon £50. Return: £109 and £88.

By the **Anchor Line** fares to Liverpool from Bombay or Karachi are:—1st saloon Rs. 800 single and Rs. 1,400 return. To Marseilles:—Rs. 747 and (return from Liverpool) Rs. 1,347.

By Ellerman's **"City" and "Hall" Lines** fares from Bombay or Karachi to Liverpool, 1st saloon are:—
Single Rs. 853, return Rs. 1,493.
2nd saloon single Rs. 640, return Rs. 1,120.
From Bombay or Karachi to Marseilles:
1st saloon single Rs. 800, return Rs. 1,447.
2nd saloon single Rs. 613, return Rs. 1,087.
Calcutta to London:
1st saloon single Rs. 907, return Rs. 1,587.
2nd saloon single Rs. 693, return Rs. 1,213.

By **Bibby Line** fares from Rangoon to London.
1st saloon single £76.
1st saloon return £132.
Rangoon to Marseilles, 1st saloon single £68.
Rangoon to Marseilles, 1st saloon return £120.

The Bibby Line fares from Colombo are as follows:—
Colombo Marseilles single £58.
Colombo Marseilles return £101.
Colombo London single £66.
Colombo London return £115.
Colombo Marseilles returning from Liverpool or London £109.

The Bibby Line steamers carry 1st class passengers only.

By **Henderson Line** fares from Rangoon to Liverpool, 1st saloon are:—single £65, return (available for 4 months) £100, (available for 2 years) £117.

By **Lloyd Triestino Line** fares from Bombay to Brindisi, Venice or Trieste are:—
1st class £66, 2nd class £54. Return rates available for 2 years at one and three-fourth fares.

Sailings from Bombay every second Wednesday alternately for Brindisi, Venice and Trieste and Naples and Genoa.

INDIAN TRAIN SERVICE.

The distances and railway fares from Bombay to the principal centres of other parts of India are as follow:—

——	Miles.	1st Class. Rs. a. p.	2nd Class. Rs. a. p.
Delhi, B. B. & C. I. Railway, *via* new Nagda-Muttra direct route	865	85 13 0	42 15 0
Delhi, G. I. P. Railway, *via* Agra	957	85 13 0	42 15 0
Simla, *via* Delhi	1,137	12 122 0	61 7 0
Calcutta, G. I. P., from Bombay, *via* Jubbulpore & Allahabad	1,349	122 12 0	61 9 6
Calcutta, G. I. P., from Bombay, *via* Nagpur	1,223	115 3 6	57 10 6
Madras, G. I. P., from Bombay, *via* Raichur..	794	79 3 0	39 9 0
Lahore, *via* Delhi	1,162	113 11 0	56 14 0

* Oct. to April inclusive. May to Sept. Rs. 115-5-0 & 57-11-0 only.

THE SUEZ CANAL.

At the General Meeting of the Suez Canal Company, held in Paris in 1928, the Chairman said that the traffic of the Suez Canal had experienced unprecedented activity during 1927. The receipts, amounting to 208,000,000 gold francs, were greater by 11 per cent. than those of 1925, which were the previous highest. The conversion into French francs of the sums thus collected had been made on the basis of the rate of exchange of 124 f., at which the pound sterling had remained since the beginning of 1927. It was proposed to fix **gross dividend** per capital share at 577.52 f., an increase of 33.50 f., as compared with 1926. The growth in the traffic which permitted this increase in dividend was evidence that after the confusion brought about by the War the economic development of the world was continuing. Apart from inevitable fluctuations, due to local and ephemeral disturbances, international trade was ever tending to increase, and their undertaking continued, as in the past, to share fully in this growth.

Transit Tariff.—In view of such brilliant results they had considered it to be their duty to continue the traditional policy of lowering the transit tariff. The Board put in force on April 1st last a reduction of 25 centimes, thus bringing down to 7f. the transit due, which, since April 1st 1925, had been 7.25f. This step should not compromise the future maintenance of the dividend at the figure which was proposed this year. The increase in the current year was, moreover, such that it would go a long way towards making good the diminution involved by the reduction for the nine months of its operation in 1928.

Receipts.—The total receipts for the year amounted to 784,595,099f., an increase of 38,047,293f., as compared with 1926. Expenditure amounted to 65,637,589f., a decrease of 4,089,587f. The directors proposed to transfer 25,000,000f. to the amortization fund for improvement works and 25,000,000f. to the fund for amortization and renewal of material. The dividend would absorb 636,642,253f., and it was proposed that, after carrying 20,000,000f. to special reserve, the balance of 3,152,147f., should be carried forward.

Improvement Schemes.—It was announced in 1914 that from and after January 1st, 1915, **the maximum draught of water** allowed to ships going through the **Suez Canal** would be increased by 1ft., making it 30ft. English.

The maximum permissible draught of ships using the Canal was 24·4 feet in 1870; in 1890 ships drawing 25·4 feet could make the passage; and during the following 24 years the increase has been at the average rate of about 1 foot every six years, thus bringing the maximum draught authorized to 29 feet.

The scheme of improvement adopted by the Company on the recommendation of the International Consultative Committee of Works, the British representatives on which are Sir William Matthews and Mr. Anthony Lister, is a comprehensive one, and the details suggest that it will meet the needs of the big ship.

A 40 Feet Channel.—The declared policy of the Canal Company in regard to the deepening of the Canal is to offer a slightly greater depth of water than that available in ports east of Suez. It is claimed that, with the exception of Sydney, there is no eastern port which at low tide has a greater depth of water than that now provided in the Canal throughout the full length of nearly 105 miles. In any case the work in hand should meet the needs of any ship likely to be built for the eastern trade during the next few years.

When the Canal was opened in 1869, the width was 72 feet and the depth about 26 feet 2 inches. In June, 1913, the width at a depth of 32 feet 8 inches had been increased to a minimum of 147 feet 6 inches over a length of about 85 miles, and to a width of 328 feet over a distance of about 20 miles. The latest scheme makes provision for a depth of 40 feet throughout and for a widening up to 196 feet 8 inches in the south section, and the cutting of an appropriate number of sidings in the north and central sections, where a minimum width of 147 feet 6 inches is believed to be sufficient for the requirements of the immediate future.

The work of enlarging the capacity of the Canal presents no special difficulty on the engineering side. A good deal of sand is occasionally driven into the channel at Port Said during storms, but a remedy for this will be found in extension of the west breakwater by about 2,700 yards at a cost of over £6,000,000. The construction of this extension, which has been in hand for the past two years, is making satisfactory progress. The Suez Roads are being adequately dredged in accordance with an agreement between the Egyptian Government and the Company.

Almost up to the end of 1915 the works for extending the jetty to the west of Port Said, works of capital importance for the **protection of the entry** to the Canal, were pushed on uninterruptedly. In November, however, for want of hydraulic lime, the manufacture of artificial rocks for this jetty was interrupted. The submarine foundations in stone and rubble of the new jetty were, as a matter of fact, completed to a length of 2,500 metres; the protective blocks were laid for 1,040 metres, and cemented for over 800 metres. The protection of the Channel is thus secured, and there is no need for any apprehension as to its future.

Travel in India.

Thirty years ago, a tour in India was possible only to the wealthy, the leisured and those who had friends in the country. The cost of the journey was very high, the methods of transportation were very slow; and the facilities for travel were so indifferent that he was a bold man who consigned himself to the mercies of the country without a sheet of letters of introduction. Now the mail which is posted in London on Thursday night, reaches Bombay in 14 days, and the passenger can travel by the same route and with the same speed as the mail. A dozen lines have covered the sea route between Europe and India and Ceylon with a plexus of regular services. The Indian Railways provide facilities on the trunk lines unsurpassed by the *trains-de-luxe* of Europe, and the Indian hotel has grown into a really comfortable caravanserai.

In the touring season, which extends from November to March, there is the attraction of a perfect climate. It is never very hot; in the North indeed it is really cool, it is always fine and fresh and bracing. If there is one country in the world to which that elusive term applies, here we have at the season when the tourist arrives the real "Indian summer." Then there is its infinite variety. India is in no sense a nation and never will be. Its peoples are wide as the Poles as under, each has its own art, its own architecture, its own customs and its own civilisation. A certain superficial resemblance runs through each; beneath lies a never-ending variety which age cannot wither nor custom stale.

The Grand Tour.—People coming to India for the first time so often ask:—"Where shall I go?" Well, wherever else the tourist may go whatever else he should leave out, he should omit nothing on the Grand Tour. It is the foolish custom nowadays to sneer at those who follow the beaten tracks, but the visitor who shuns any part of the orthodox journey across India misses what nothing else can repay. **Bombay** is by far the most convenient point of departure, for here "the world end steamers wait," here is one of the finest cities in the British Empire, and here the traveller can best complete his outfit and arrangements. From Bombay stretch northwards the two great trunk lines of India. One the **Bombay, Baroda & Central India Railway,** leads through the pleasant garden of Gujarat to Ahmedabad, the ancient Moslem capital of the Province containing fine examples of Mahomedans and Jain architecture; thence to Abu for the famous Jain temples of Dilwara, and on to Ajmere, Jaipur and Agra. The other by the **Great Indian Peninsula Railway** carries the tourist over the Western Ghats by a superb mountain railway to Gwalior, whose rock fortress rises like a giant battleship from the plain, and so on to Agra. Of the glories of the Taj Mahal, Agra Fort, and the deserted city of Fatehpur Sikri it were supererogatory to speak. Another easy stage leads to **Delhi** that amazing collection of cities, dominated by the little Ridge where British valour kept the mutinous hordes at bay, and finally drove them from the city by a feat of arms unsurpassed in history. Then from Delhi the East Indian line leads comfortably to Benares, Lucknow and Calcutta with the opportunity of an excursion to Cawnpore, if the spirit moves. The great charm of the Grand Tour is that it reveals the best that India can show. This route has the additional advantage that it fits in with any digressions which the time and purse of the traveller may permit. No one who can spare the time should fail to push northwards from Delhi to Peshawar, where the flower of the army keeps watch and ward over the Khyber, and up the dread Pass to the eyrie where the fort of Ali Masjid bars the way to all invaders. **Calcutta** is the best starting point for Darjeeling, though unfortunately the magnificent mountain panorama visible from there is often obscured at this season by mists. Then from Calcutta two alternatives open. A fine service of mail steamers leads to **Burma**, and one of the unforgettable memories of the East is a voyage down the Irrawaddy from Bhamo or Mandalay to Prome. Again, either direct from Calcutta, or *via* Burma, is an easy route to **Madras** and by way of Madura and Trichinopoly, with their peerless Hindu temples, back to Bombay, or on through Tuticorin to **Colombo**. But indeed the possibilities of expanding this tour are endless. Bombay is the best centre for the rock temples of Elephanta, Kenheri, Karli, Ellora and Ajanta. Calcutta is only a short distance from Puri the one Indian temple where there is no caste, and perhaps the most remarkable Hindu temple in the country. From Calcutta also start the river steamers which thread the steamy plains of Bengal and run to the tea gardens of Assam.

SPECIMEN TOURS.

A number of specimen tours in India are given below. They are taken from one of Messrs. Thos. Cook & Sons, Ltd.'s publications, from which firm further information may be obtained. The traveller will also find he can obtain assistance from the principal Shipping Agents and Railway Companies, or from Messrs. Cox & Co., Messrs. Grindlay & Co., and Lloyds Bank:

—	1st Class.	2nd Class Rail, 1st Class Steamer.
FROM BOMBAY TO CALCUTTA.	Rs. a.	Rs. a.
Via the North-West Provinces to Calcutta (including side trip from Calcutta to Darjeeling).		
TOUR I.—From Bombay per B. B. & C. I. Railway *via* Ahmedabad, Abu Road (for Mount Abu), Ajmer, Jaipur, Delhi, Agra, Cawnpore, Lucknow and Benares to Calcutta, thence to Darjeeling, and back to Calcutta.	243 8	132 4

— —	1st Class.	2nd Class Rail, 1st Class Steamer.
FROM BOMBAY TO CALCUTTA—*contd.*	Rs. a.	Rs. a.
TOUR II.—From Bombay per G. I. P. Railway *via* Itarsi, Gwalior, Agra, Delhi, Tundla Junction, Cawnpore, Lucknow and Benares to Calcutta, thence to Darjeeling, and back to Calcutta	240 14	130 13
FROM BOMBAY TO COLOMBO.		
Via the North-West Provinces, Calcutta and Southern India to Colombo (including side trip from Calcutta to Darjeeling).		
TOUR III.—From Bombay as in Tour No. I (*via* B. B. & C. I. Ry., Jaipur and the North-West Provinces) to Calcutta side trip to Darjeeling and back to Calcutta, thence *via* Khurda Road, for Puri (Jugganath), Madras, Tanjore, Trichinopoly, Madura, Danushkodi and Talaimannar to Colombo	425 13	224 2
TOUR IV.—From Bombay as in Tour No. II (*via* G. I. P. Ry., Itarsi, Agra and the North-West Provinces) to Calcutta, side trip to Darjeeling and back to Calcutta, thence as in Tour No. III to Colombo (*via* Southern India)	423 3	222 12
Via the North-West Provinces, Calcutta (including Darjeeling), Burma and Southern India		
TOUR V—From Bombay as in Tour No. I (*via* B. B. & C. I. Ry., Jaipur and the North-West Provinces) to Calcutta, side trip to Darjeeling and back to Calcutta, thence British India Steamer to Rangoon, Rail to Mandalay. Irrawaddy Steamer to Prome, Rail to Rangoon; British India Steamer to Madras, Rail *via* Tanjore, Trichinopoly, Madura to Danushkodi; Steamer to Talaimannar and Rail to Colombo	633 4	439 13
TOUR VI.—From Bombay as in Tour No. II (*via* G. I. P. Ry., Itarsi, Agra and the North-West Provinces) to Calcutta, thence as in Tour No V. to Colombo	630 11	438 7
FROM BOMBAY TO RANGOON.		
Via the North-West Province and Calcutta to Rangoon (including a tour in Burma, also including a side trip from Calcutta to Darjeeling).		
TOUR VII.—From Bombay as in Tour No. I (*via* B. B. & C. I. Ry., Jaipur and the North-West Provinces) to Calcutta side trip to Darjeeling and back to Calcutta, thence British India Steamer to Rangoon, Rail to Mandalay, Irrawaddy Steamer to Prome, Rail to Rangoon	454 13	296 7
TOUR VIII.—From Bombay as in Tour II (*via* G. I. P. Ry., Itarsi, Agra and the North-West Provinces) to Calcutta, side trip to Darjeeling and back to Calcutta, thence British India Steamer to Rangoon. Rail to Mandalay, Irrawaddy, Steamer to Prome, Rail to Rangoon ..	452 3	295 0
FROM CALCUTTA TO BOMBAY.		
Via the North-West Provinces.		
TOUR IX.—From Calcutta *via* Benares, Lucknow, Cawnpore, Tundla, Agra, Delhi, Rewari, Jaipur, Ajmer (for Udaipur), Abu Road (for Mt. Abu), Ahmedabad and Baroda to Bombay	159 12	79 15
TOUR X.—From Calcutta *via* Benares, Moghal Serai, Cawnpore, Tundla, Agra, Delhi, Rewari, Jaipur, Ajmer (for Udaipur), Abu Road (for Mt. Abu), Ahmedabad and Baroda to Bombay	157 13	78 15
TOUR XI.—From Calcutta *via* Benares, Moghal Serai, Cawnpore, Tundla, Agra, Gwalior and Itarsi to Bombay..	139 7	69 12
TOUR XII.—From Calcutta *via* Benares, Moghal Serai, Cawnpore, Delhi, Muttra, Agra, Gwalior and Itarsi to Bombay	155 3	77 11

——	1st Class.	2nd Class Rail, 1st Class Steamer.
CIRCULAR TOUR FROM CALCUTTA.	Rs a.	Rs. a.
TOUR XIII.—From Calcutta *via* Benares, Lucknow, Cawnpore, Tundla, Agra, Bandikui, Jaipur, Delhi, and Allahabad to Calcutta	173 10	87 15
Extensions, Via Southern India to Colombo.		
TOUR XIV.—From Bombay *via*, Poona, Hyderabad, Wadi, Raichur, Madras, Tanjore, Trichinopoly, Madura, Danushkodi, and Talaimannar to Colombo	173 5	87 5
TOUR XV.—From Bombay *via* Poona, Hyderabad, Wadi, Guntakal, Bangalore, Erode, Trichinopoly, Madura, Danushkodi, and Talaimannar to Colombo	167 8	84 7
Extensions to above Tours.		
From Ajmer to Udaipur and return	46 4	23 2
From Abu Road to Mount Abu and return, one seat in motor (This excursion is strongly recommended, the scenery being very beautiful) ..	22 0	....
From Delhi to Lahore and return *via* Umballa and Amritsar	41 13	20 15
From Delhi *via* Bhatinda, Ferozepore to Lahore, returning *via* Amritsar, Umballa to Delhi	41 13	20 15
From Calcutta to Darjeeling and return	82 12	51 4
From Colombo to Kandy and return	12 3	7 10
From Kurda Road to Puri (Jagannath) and return	7 12	3 14

(*All fares subject to change without previous notice.*)

HOTELS IN INDIA, BURMA, CEYLON AND MALAYA.

AGRA.—Cecil, Laurie's Great Northern, Metropole.
AHMEDABAD.—Grand.
ALLAHABAD.—Grand.
BANGALORE.—Cubbon, West End.
BARODA.—The Guest House.
BENARES.—Clark's, de Paris.
BOMBAY.—Apollo, Grand, Majestic, Taj Mahal.
CALCUTTA.—Continental, Grand, Great Eastern, Spence's.
CAWNPORE.—Civil and Military.
COONOOR.—Glenview.
DARJEELING.—Grand (Rockville), Mount Everest Park.
DELHI.—Cecil, Elysium, Maidens, Swiss.
GWALIOR.—Grand.
GULMARG (Kashmir)—Nedou's.
JAIPUR.—Jaipur, Kaiser-i-Hind, New.
JUBBULPORE.—Jackson's.
KARACHI.—Carlton, Bristol, Killarney, North Western.
KHANDALLA.—Khandalla.
KODAIKANAL.—Lakeview, Golf Links.
KURSEONG.—Clarendon.
LAHORE.—Faletti's, Nedou's.
LANOULI.—Hamilton.
LUCKNOW.—Carlton, Civil and Military, Hiltons, Royal.
MADRAS.—Connemara, Bosotto.
MAHABLESHWAR.—Race View.
MATHERAN.—Rugby.
MOUNT ABU.—Rajputana, Mount.
MURREE.—Viewforth.
MUSSOORIE—Cecil, Charleville, Hakman Grand, Savoy.
MYSORE.—Caolton.
NAINI TAL.—Grand, Metropole, Royal.
OOTACAMUND.—Savoy.
PESHAWAR.—Deans Hotel.
POONA.—Connaught House, Napier, Poona.
PURI.—B. N. Railway Hotel
QUETTA.—Stanyon's.
RAJPORE.—Carlton.
RAWALPINDI.—Flashman's.
SECUNDERABAD.—Montgomery's.
SIMLA.—Cecil, Grand, Carlton.
SRINAGAR (Kashmir).—Nedou's.
SHIVAPURI.—Shivapuri.
UDAIPUR.—Udaipur.

Burma.

RANGOON.—Allandale, Minto Mansions, Royal Strand.
MAYMYO.—Lizette Lodge.
KALAW.—Kalaw.

Ceylon.

ANURADHAPURA.—Grand.
BANDARAWELA.—Bandarawela Grand.
COLOMBO.—Bristol, Galle Face, Grand Oriental.
GALLE.—New Oriental.
HATTON.—Adam's Peak.
KANDY.—Queen's, Suisse.
NUWARA ELIYA.—Carlton, Grand, Maryhil, St. Andrew's.

Malaya.

IPOH.—Station.
KUALA LUMPUR.—Empire, Station.
PENANG.—Eastern and Oriental, Runnymede.
SINGAPORE.—Adelphi, Europe, Raffles, Sea-View.

The New Capital.

The transfer of the capital of India from Calcutta to **Delhi** was announced at the Delhi Durbar on December 12, 1911. It had long been recognised as necessary, in the interests of the whole of India, to de-provincialise the Government of India, but this ideal was unattainable as long as the Government of India were located in one Province, and in the capital of that Province—the seat of the Bengal Government—for several months in every year. It was also desirable to free the Bengal Government from the close proximity of the Government of India which had been to the constant disadvantage of that Province. To achieve these two objects the removal of the capital from Calcutta was essential: its disadvantages had been recognised as long ago as 1868, when Sir Henry Maine advocated the change. Various places had been discussed as possible capitals, but Delhi was by common consent the best of them all. Its central position and situation as a railway junction, added to its historical associations, told in its favour; and, as Lord Crewe said in his despatch on the subject, "to the races of India, for whom the legends and records of the past are charged with so intense a meaning, this resumption by the Paramount Power of the seat of venerable Empire should at once enforce the continuity and promise the permanency of British sovereign rule over the length and breadth of the country."

The foundation stone of the new capital were laid by the King Emperor on December 15, 1911, the finally selected site being on the eastern slopes of the hills to the south of Delhi, on the fringe of the tract occupied by the Delhis of the past. The land chosen is free from liability to flood, has a natural drainage, and is not manworn. It is not cumbered with monuments and tombs needing reverent treatment, and the site is near the present centre of the town of Delhi. A Committee consisting of Surgn.-General Sir C. P. Lukis, Mr. H. T. Keeling, C.S.I., A.M.I.C.E., and Major J. C. Robertson, I.M.S., was appointed to consider the comparative healthiness of the site and of an alternative one to the North of the existing city. Their report, dated 4th March, 1913, states that "the Committee, after giving full consideration to the various points discussed in the above note, is bound to advise the Government of India that no doubt can exist as to the superior healthiness of the southern site, the medical and sanitary advantages of which are overwhelming when compared with those of the northern site."

The Town Plan and Architecture.—A report by a Town-Planning Committee, with a plan of the lay-out, was dated 20th March, 1913. Work was begun in accordance with it and its main lines have been followed throughout. The central point of interest in the lay-out, which gives the motif of the whole, is Government House, and two large blocks of Secretariats. This Government centre has been given a position at Raisina hill near the centre of the new city. Sir Edwin Lutyens is the architect for Government House and Mr. Edward Baker for the Secretariats. The former building is estimated to cost approximately Rs. 140 lakhs and the latter groups were originally estimated to some Rs. 124 lakhs. To the east of the forum, and below it, is a spacious forecourt defined by an ornamental wall and linked on to the great main avenue or parkway which leads to Indrapat. Across this main axis runs an avenue to the Shopping centre. Other roads run in different directions from the entrance to the forum. The axis running north-east towards the Juma Masjid forms the principal business approach to the present city. The railway station for the new city also finds its place beside this road. The main roads or avenues range from 76 feet to 150 feet in width with the exception of the main avenue east of the Secretariat buildings where a parkway width of 1,175 feet has been allowed. The principal avenues in addition to the main avenues are those running at right angles to the main east to west axis.

For a temporary capital, for the use of the Government of India during the period of the building of the new capital an area was selected along the Alipur Road, between the existing civil station of Delhi and the Ridge. The architecture and method of construction were similar to those adopted in the exhibition buildings at Allahabad in 1910; but the buildings have outlasted the transitional period for which they are intended. Army Headquarters are still housed in them in the winter and others are occupied for various purposes, including the temporary accommodation of Delhi University.

In October, 1912, by proclamation, there was constituted an administrative **enclave of Delhi** under a Chief Commissioner. This enclave was entirely taken from the Delhi district of the Punjab and its total area is 573 square miles. On the basis of the Census of 1911, the population of the area originally included in the Province was 398,269 and of the new area 14,552, or a total of 412,821. The population of the Municipal town of Delhi was 2,29,144. The plans of the New Capital allow for a population within it of 70,000, Its present population is approximately 40,000. Sites have been allotted for forty Ruling Princes and Chiefs to build houses for their own occupation during their visits to the New City, and several of these habitations have been erected.

There was, as regards architecture, a prolonged "battle of the styles" over Delhi. Finally, to use the language of the architect, it has been the aim "to express, within the limit of the medium and of the powers of its users, the ideal and the fact of British rule in India, of which the New Delhi must ever be the monument." The inspiration of the designs is manifestly Western, as is that of British rule, but they combine with it distinctive Indian features without abandoning the architects' aim to avoid doing violence to the principles of structural fitness and artistic unity.

Cost of the Scheme.—It was at first tentatively estimated that the cost of the new capital would be four million sterling and that sum was given in the original despatch of the Gov-

ernment of India on the subject. Various factors have since then increased the cost, the chief of these being the immense rise in prices since the war, and the Legislative Assembly were informed by Government on 23rd March 1921, that the revised estimates then amounted to 1,307 lakhs of rupees. This amount includes allowances for building new Legislative Chambers and Hostels for Members of the Indian Legislature, which were not allowed for in the earlier estimates. The New Capital Enquiry Committee, in its report published in January 1923 estimated the total expenditure at Rs. 1,292 lakhs including Rs. 42 lakhs for loss by Exchange. This figure still stands. Actual expenditure up to January 1927, the latest date for which figures have been published, was Rs. 12,43 lakhs, of which Rs. 1,69,12,000 was spent upon the Secretariats.

The Project Estimate contains certain items such as land, residences, water supply, electric light and power, and irrigation on which recoveries in the form of rate or taxes will, in addition to meeting current expenditure, partially at any rate cover the interest on the capital outlay whilst there are other items on which some return on account of the sale of leases, general taxes and indirect receipts may be expected.

Progress of the work.—The construction of New Delhi has made satisfactory progress, having regard to the curtailment of the Budget allotment, in consequence of the war and the return of officers and other establishments to their civil work made possible a considerable speeding up of constructional operations provided money can be provided to pay for them. The Secretariats were so far advanced that there were transferred to them from Calcutta in October, 1924, the offices of the Accountant-General, Central Revenues, and the headquarters of the Royal Air Force in India were also housed in them in the winters of 1924-25 and 1925-26. The residential buildings for Government officers and staff of various grades were then nearly completed. The whole of the civil side of Government moved from old Delhi into their quarters in the new Secretariats on coming down from Simla in November, 1926. The present position is that all Government Departments including the Army Departments, and R. A. F. Headquarters, have their offices in the new City buildings, on which the builders are completing the final details, but that Army Headquarters continue in the old "Temporary Secretariat," in Old Delhi. The Members of H. E. the Viceroy's Executive Council, except H. E. the Commander-in-Chief, live in their new official residences in the new capital. H. E. the Viceroy is expected to take up his residence in the new Government House there in the winter of 1929. His Excellency for the present resides at Viceregal Lodge in Old Delhi. The Commander-in-Chief continues at his old residence, Flagstaff House, Old Delhi, and will similarly transfer to New Delhi at the end of 1929. The house originally built for him in New Delhi was in 1928 bought by H. H. The Maharajah of Kashmir and the erection of another residence for him was commenced soon afterwards. The Government have recently devoted special consideration to the question whether their ordinary annual months residence in Delhi should be extended each year to 7 months, and early in 1928 decided in consultation with the India Office to endeavour to stay in Delhi for half of each year, the new order being introduced in 1928 by keeping the Secretariat in New Delhi till mid—April and bringing it down from Simla again in mid—October.

Art Decorations.—The Government of India in 1927 approved a scheme for the encouragement of Indian artists by providing facilities for the decoration of certain buildings in New Delhi. The outlines of the scheme are briefly as follows. A certain number of domes and ceilings in the New Secretariat Buildings at Delhi suitable for decoration were selected. The various schools of art in India, as well as individual artists, were invited through local Governments, to send in by the beginning of March 1928 small scale designs for approval by a Committee. After approval by the Committee both as regards the design and colour the pictures were to be drawn out and painted to full size on canvas, and, if finally approved by the Committee, fixed according to the marouflage process *in situ*. Other techniques, such as fresco or tempera, were optional. Artists or schools of art, who sent in small scale drawings, had to bear the initial expense of preparing them. When these were approved by the Committee, the out-of pocket expenses, paid in addition to a suitable honorarium Government undertook to pay for the finished pictures done from approved sketches but give no guarantee that the finished paintings will permanently be preserved. The Committee consisted of Sir John Marshall, Kt., C.I.E., Director-General of Archaeology in India, as Chairman and one or more experts to be nominated by him as members. Government intimated that historical or allegorical subjects would be given preference over religious ones, and English artists living in India were barred from competition, the work being strictly reserved to Indian artists. Numerous artists submitted designs, especially those of Western India, and with such satisfactory results that Sir John Marshall and his fellow Committeemen approved of nearly all.

Opinion of the Legislature.—Considerable discussion regarding the new works took place in the Assembly in 1921. The following unofficial resolution was carried:—"This Assembly recommends to the Governor-General in Council that in the interests of economy and of general convenience alike the execution of the programme of New Delhi works may be expedited and the necessary funds provided or raised so that the Secretariat and Legislative buildings and connected works including residences may be completed as early as practicable."

A non-official Member in the Legislative Assembly on 28th September, 1921, at Simla, moved a recommendation to Government "to appoint a Committee to inquire into the possibility of establishing a permanent Capital of India in a place possessing salubrious and temperate climate throughout the year." This proposal was ridiculed by several of his non-official colleagues and was eventually rejected without a division.

H.R.H. the Duke of Connaught, on 12th February, 1921, laid the foundation stone of a large group of parliamentary buildings on a site close to the south-east of the Secretariats. The building is an imposing pile circular in shape, consisting in the main of three horse shoe-shaped Chambers for the Chamber of Princes, Council of State and Legislative Assembly respectively and surmounted by a large dome over a Central Library connecting all three Chambers.

H.E. the Viceroy (Baron Irwin) proceeded in state to the new Legislative buildings, henceforward to be known as the Council Buildings and formally declared them open on 18th February 1927. The India legislature began its sessions in them next day.

During 1928, official and public attention became focussed on the need to effect drastic improvements in some of the crowded areas of the old city and to provide for its expansion and for suburban developments. This led to the examination of the possibilities of the area lying between the old and new cities and of the desirability of driving connecting roads through the City walls in order to give access outwards in this direction. Plans of this character are at the time of writing still under consideration.

All-India War Memorial.—H. R. H. the Duke of Connaught on 10th February, 1921, laid the foundation-stone of an All-India War Memorial at the southern end of the Central Vista. The place chosen is a fine position in the centre of the circular Princes' Park and the construction of the building is well forward but for economy's sake is being proceeded with comparatively slowly.

The Memorial takes the form of a triumphal arch spanning Kingsway, the avenue running down the centre of the Vista. It is generally similar to the Arc de Triomphe in Paris but is simpler in a way which will probably increase its grandeur and dignity. The monument reaches a height of 160 feet and the inner height of the arch is 87 feet 6 inches and its breadth 70 feet. Over the arch on both fronts appears in capital letters the single word INDIA and this is flanked on each side by the initials MCM (*i.e.*, 1900) whilst immediately below them on the left hand are the initials XIV (*i.e.*, 14) and on the opposite side the figures XIX (*i.e* 19) above the Arch is a circular stone bowl 11½ feet in diameter. This is intended to be filled with burning oil on great anniversaries and other occasions so that there will be shining fire by night and a column of smoke by day. The memorial is solely Indian in purpose and will bear the names of Indian regiments only.

Educational Institutions.—It was proposed during 1914 that a higher college for Chiefs should be established at Delhi and in this connexion a conference of Chiefs and Political Officers was held at Delhi at which the Viceroy presided. The proposal is still under consideration. To implement it would require an estimated capital outlay of Rs. 12½ lakhs.

The Government of India further in the Spring session of their Legislature in 1922 introduced and carried a Bill for the establishment of a unitary, teaching and residential university of Delhi, the buildings for which would be erected in the new capital. The plan was to provide a local university on the model recommended for Dacca University by the Calcutta University Commission. The provision of funds for the complete realisation of the university must be a matter of time and it was, therefore, decided to commence work with the existing colleges in their present buildings and to permit them gradually to modify, their organisation. The initial work of organisation was quickly effected by the Executive Council. Unfortunately the inability of the Government of India to allot considerable funds was a servere handicap. It was hoped that H. E. the Viceroy would be able to lay the foundation-stone of the university buildings in November, 1922, but this proved impracticable. The site for the new buildings required has not yet been settled. Government and the University Authorities are examining this point in consultation, particularly with reference to the question whether to build in the new capital or to utilise buildings that may become available elsewhere. The general question of the finances of the University was in 1927 the subject of inquiry by a special Committee appointed by Government. For the present the University is housed in the temporary buildings in old Delhi occupied by the Civil Secretariat until last year.

Freemasonry in India.

In 1728 a dispensation was granted by the Grand Lodge of England to Geo. Pomfrett, Esq., authorising him to "open a new Lodge in Bengal." Of this personage nothing further is known but under Capt Farwinter, who in the following year succeeded him as Provincial Grand Master of India, Lodge was established in 1730, which in the Engraved Lists is distinguished by the arms of the East India Company, and is described as "No. 72 at Bengal in the East Indies." The next Provincial Grand Masters were James Dawson and Zech. Gee, who held office in 1740; after whom came the Hon. Roger Drake, appointed 10th April 1755. The last named was Governor of Calcutta at the time of the attack made on the settlement by Surajah Dowlah in 1756. Drake missed the horrors of the Black Hole by escaping and was accused of deserting his post, but, though present at the retaking of Calcutta by Admiral Watson and Clive, it is improbable that he resumed the duties of his masonic office after the calamity that befell the settlement.

The minutes of the Grand Lodge inform us that William Mackett, Provincial Grand Master of Calcutta, was present at the meeting of that body, November 17th, 1760, and we learn on the same authority that at the request of the "Lodges in the East Indies" Mr. Cullin Smith was appointed P. G. M. in 1762. At this period it was the custom in Bengal "to elect the Provincial Grand Master annually by the majority of the votes of the members present, from amongst those who passed through the different offices of the (Prov.) Grand Lodge and who had served as Dep. Prov. Grand Master." This annual election as soon as notified to the Grand Lodge of England was confirmed by the Grand Master without its being thought an infringement of his prerogative. In accordance with this practice, Samuel Middleton was elected (P. G. M. circa) in 1767; but in passing it may be briefly observed that a few years previously a kind of roving commission was granted by Earl Ferrars in 1762-64 to John Bluvitt, Commander of the "Admiral Watson," Indiaman "for East India where no other Provincial Lodge is to be found." Middleton's election was confirmed October 31st, 1768, and, as the dispensation forwarded by the Grand Secretary was looked upon as abrogating the practice of annual elections, he accordingly held the office of D. G. M. Unfortunately the records of the P. G. L. date back only to 1774, and thus much valuable information is lost to us. This Grand Lodge continued working until 1792 when it ceased to meet. It seems that the officers were selected from only two Lodges much to the dissatisfaction of the other Lodges, and resulted in most of the dissatisfied bodies seceding and attaching themselves to the Athol of Ancient Grand Lodge. In 1813 at the Union both the Ancients and Moderns in Calcutta combined and gave their allegiance to the **United Grand Lodge of England** and have since been working peaceably under the Provincial Grand Lodge of Bengal which was revived in that year and in 1840 created a District Grand Lodge.

Madras.—The earliest Lodge in Southern India (No. 222) was established in Madras in 1752. Three others were also established about 1766 In the same year Capt. Edmund Pascal was appointed P. G. M. for Madras and its Dependencies and in the following year another Lodge was established at Fort St. George. In 1768 the Athol (or Ancients) invaded this District and in 1782 established a Provincial Grand Lodge and both these Provincial Grand Bodies continued working peaceably side by side until the union. Indeed, though not generally known, these two Grand Bodies made an attempt at coalition long before any such movement was made by their parent bodies, the Grand Lodge of England, and the Ancient Grand Lodge, and Malden in his History of Freemasonry in Madras states that in a great measure they succeeded. At the Union in 1813 all the bodies in Madras gave their allegiance to the United Grand Lodge. One event worthy of note was the initiation in 1776 at Trichinopoly of the eldest son of the Nawab of Arcot, Undat-ul-Amari, who in his reply to the congratulations of the Grand Lodge of England stated "he considered the title of English Mason as one of the most honourable that he possessed." This document is now stored in the archives of the United Grand Lodge.

Bombay.—Two Lodges were established in this Presidency during the 17th century, Nos. 234 at Bombay in 1758 and 569 in Surat in 1798, both of which were carried on the lists until the union when they disappeared. A Provincial Grand Master, James Todd, was appointed but there is no record that he exercised his functions and his name drops out of the Freemasons' Calendar in 1799. In 1801 an Athol Warrant was granted (No. 322) to the 78th foot which was engaged in the Maratha War under Sir Arthur Wellesley. In 1818 Lord Moria was asked to constitute a Lodge to be known by the name of St. Andrew by eight Masons residing there and also to grant a dispensation for holding a Provincial Grand Lodge for the purpose of making the Hon. Mountstuart a Mason, he having expressed a wish to that effect. The Petitioners further requested "that his name might be inserted in the body of the warrant, authorising them to instal him after being duly passed and raised a Deputy Grand Master of the Deccan." Of the reply to this application no copy has been preserved. Lodge Benevolence was established in Bombay in 1822.

In 1823 a Military Lodge "Orion-in-the-West" was formed in the Bombay Artillery and installed at Poona as No. 15 of the Coast of Coromandel. It seems from Lane's records that in 1830 it was discovered that this Lodge was not on the records of the United Grand Lodge of England. A Warrant was subsequently issued bearing date 19th July 1833. According to the early proceedings of this Lodge, members were examined in the Third Degree and passed to the chair in the Fourth Degree for which a fee of three gold mohurs was charged. In the following year a second Lodge was established at Poona by the Provincial Grand Lodge of Bengal which however left no trace of its existence. In 1825 the civilian element of "Orion" seceded and formed the "Lodge of Hope" also at Poona No. 802.

Here "Orion" unrecognized at home, aided in the secession of some of its members, who

obtained a warrant, on the recommendation of the parent Lodge, from the Grand Lodge of England. Two years later it was discovered that no notification of the existence of "Orion-in-the-West" had reached England, nor had any fees been received, although these including quarterages had been paid into the Provincial Grand Lodge, Coast of Coromandel. It was further ascertained that in granting a warrant for a Bombay Lodge the Provincial Grand Master of Coromandel had exceeded his powers. Ultimately a new warrant No. 598 was granted as already stated in 1833. Lodge "Perseverance" was started in Bombay No. 818 in 1828. Up to this time the jurisdiction of the Grand Lodge of England in India had not been invaded; but in 1836 Dr. James Burnes was appointed by the Grand Lodge of Scotland, P. G. M. of Western India and its Dependencies. No Provincial Grand Lodge however was formed until 1st January 1838. A second Scottish Province of Eastern India was started which on the retirement of the Marquis of Tweedale was absorbed within the jurisdiction of Dr. Burnes, who in 1846 became Provincial Grand Master for all India (including Aden) but with the proviso, that this appointment was not to act in restraint of any future sub-division of the Presidencies. Burnes may be best described as being in 1836, in ecclesiastical phrase as a Provincial Grand Master "in partibus infidelium" for whatever Lodges then existed throughout the length and breadth of India were strangers to Scottish Masonry. But the times were propitious. There was no English Provincial Grand Lodge in Bombay and the Chevalier Burnes, whom nature had endowed with all the qualities requisite for Masonic Administration, soon got to work and presented such attractions to **Scottish Freemasonry** that the strange sight was witnessed of English Masons deserting their mother Lodges, to such an extent that these fell into abeyance, in order to give support to Lodges newly constituted under the Grand Lodge of Scotland. In one case, indeed, a Lodge "Perseverance" under England went over bodily to Scotland, with its name, jewels, furniture, and belongings, and the charge was accepted by Scotland. This Lodge still exists in Bombay and now bears No. 338 on the Register of Scotland. From this period, therefore, Scottish Masonry flourished, and English Masonry declined until the year 1848 when a Lodge St. George No. 807 on the Rolls of the Grand Lodge of England was again formed at Bombay, and for some years was the solitary representative of English Masonry in the Province. In 1844 Burns established a Lodge "Rising Star" at Bombay for the **admission of Indian gentlemen** the result of which is seen at the present day. Thus the seed planted at Trichinopoly in 1776 by the initiation of Andat-ul-Amari has borne fruit, resulting in the initiation of thousands of Indian gentlemen of all castes and creeds, and which has gone far to establishing that mutual trust between West and East, a distinguishing characteristic of Speculative Freemasonry. A Provincial Grand Lodge was re-established in Bombay in 1860, and converted into a District Grand Lodge in 1871.

The Grand Lodge of England.—All three Constitutions of the United Kingdom, the United Grand Lodge of England, the Grand Lodge of Ireland and the Grand Lodge of Scotland hold jurisdiction in India. By far the largest is the first; the next largest is the third and the number of Lodges under Ireland is as yet small. The Grand Lodge of England divides its rule under Five District Grand Masters independent of each other and directly subordinate to the Grand Master of England by whom they are appointed.

Bengal.

82 Lodges. Rt. Wor. Bro. H. R. Nevill, C.I.E., O.B.E., Dis G. Master. I.C.S., P.G.D.; Dy. D. G. M. Eric Studd, P.G.D.; Assist. D. G. M. W. C. N. Dundas.

Madras.

33 Lodges. Dis. G. M.. Rt. Wor. Bro. A. Y. G. Campbell, C.S.I., C.I.E., C.B.E., V. D., I.C.S. P. G. D.; Dy. D. G. M. P. M., Sivangnam Mudliar, P. G. D.

Bombay.

48 D.G.M. Rt.-Wor.-Bro. Sir Reginald A. Spence, Kt., P.G.D.; Dy. D.G.M., R. H. A. Delves.

Punjab.

34 Lodges. Rt. W. Bro. C. A. Barron, C.S.I., C.I.E., C.V.O., I.C.S., District Grand Master. D. E. Johnstone. P.G., St. B., Dy. D.G.M.

Burma.

17 Lodges. Rt. W. Bro. The Hon'ble Sir Guy Rutledge, Kt., K. C., District Grand Master. W. Kendall, P.A.G.D. of C., Dy. Dis. G. Master.

The Grand Lodge of Scotland exercises its rule through a Grand Master of all Scottish Freemasonry in India, who is elected by the Brethren subject to confirmation by the Grand Master Mason of Scotland. Mr. H. P. Gibbs, A.M.I.E.E., etc., J.P., is the present incumbent of the office, and controls 73 Lodges. Under him the several districts are in charge of the following Grand Superintendents:—

Lt.-Col. J. C. Colenso, G.Supdt.,		Northern India.
Col. A. A. Meaden .. ,,	,,	Central ,,
Lt.-Col. R.F.D. Burnett	,,	Southern ,,
A. Barr. Pollock .. ,,	,,	Eastern ,,

The Grand Secretary is R. W. Bro. Arthur W. S. Wise, J.P., 17, Murzban Road, Fort, Bombay.

The Grand Lodge of Ireland granted a warrant to establish a Lodge at Kurnal in 1837, but it was short lived. An attempt was made in 1869 to establish a Lodge in Bombay, but on the representation of the Grand Secretary of England, to the Deputy Grand Secretary of Ireland that it would be objectionable to create a third masonic jurisdiction in the Province, there being two already, *viz.*, English and Scottish, the Grand Lodge of Ireland declined to grant the warrant. In 1911, however, a warrant was sanctioned for the establishment of Lodge "St. Patrick" and since that year two other Lodges have sprung into being.

The Grand Lodge of Ireland has no District Grand Master in India at present, the Lodges corresponding direct with the Grand Lodge in Dublin. There are ten Lodges, 4 in Calcutta, 3 in Ceylon and 3 in Bombay.

Royal Arch Masonry.—Under England, the District Grand Master in any District is nearly always created also Grand Superintendent, his Deputy as Second and another Companion as Third Principal.

Under Ireland there is no local jurisdiction and under Scotland the office is elective subject to confirmation.

The five English Districts are constituted as under:—

Bengal.

28 Chapters. Grand Supdt. H. R. Nevill, C.I.E., O.B.E., I.C.S.

Madras.

17 Chapters. A. Y. G. Campbell, C.I.E., C.B.E., V.D., I.C.S.

Bombay.

25 Chapters. M. Ex. Comp. Sir Reginald A. Spence, Kt., Grand Superintendent.

Punjab.

21 Chapters. Most Ex. Compn. C. A. Barron, C.S.I., C.I.E., C.V.O., I.C.S., Grand Superintendent.

Burma.

6 Chapters. The Hon'ble Sir Guy Rutledge, Kt., K.C., Grand Superintendent.

Royal Arch Masonry under Scotland has a separate constitution to Craft Freemasonry. The District Grand Chapter of India is at present ruled by M. E. Camp. A. M. Kajiji under whom there are about 30 Chapters in India. The Grand Secretary of all Scottish Freemasonry in India is also District Grand Scribe E. of Scottish R. A. Masonry.

There is one Irish Chapter in Calcutta.

Mark Masonry.—Under England, Mark Masonry is worked under the Grand Mark Lodge of England and Wales, and divided into separate Districts; but in most cases the District Grand Master is also District Grand Mark Master.

Bengal.

30 Lodges. C. D. Stewart, D.G.M.

Bombay.

18 Lodges. Rt. W. Bro. Sir Reginald Spence, District Grand Master.

Madras.

13 Lodges. A. Y. G. Campbell, C.I.E., C.B.E., V.D., I.C.S., District Grand Master.

Punjab.

15 Lodges. Rt. W. Bro. Lt.-Col. G. T. Davyst, O.B.E., District Grand Master.

Burma.

6 Lodges. Rt. W. Bro. Arthur Blake, District Grand Master.

The Mark degree is incorporated with the Royal arch degree in Irish Chapters. Mark degree is worked in some S. C. Lodges, but mostly in R. A. Chapters, in which the Excellent R.A.M. and other degrees can be obtained. S. C. Chapters insist upon candidates being Mark Master Masons before exaltation. Mark degree in Craft Lodges is conferred by the Rt. Wor. Master in S. C. Craft does not recognise the ceremony of Rt. W. Mark Master. This is confined strictly to Chapters. Each Chapter has a Lodge of M. M. M. working under its charter. Separate charters for Mark Lodges are only issued by the G. Chapter of Scotland.

Other Degrees.—There are many side degrees worked in India, of the Ancient and Accepted Rite, no degree higher than the 18° is worked in India under England, but under Scotland the 30° is worked. The Knight Templar Degree is also worked in several places under both English and Scottish jurisdiction. There are fourteen 18th Degree Chapters working in India.

Roman Eagle Conclave No. 43, Bombay.

St. Mary's Commandery No. 43, Bombay.

R. A. Mariner, 72, 514 and 662, Bombay.

R. A. Mariner, 61, 81, 82 and 106, Madras.

R. A. Mariner, 98, 193, 219, 279 and 429, Punjab.

Secret Monitor, 14, 21, 36, 37, 40 and 42, Madras.

Benevolent Associations.—Each District works its own benevolent arrangements which include the Relief of Distressed Masons, educational provision for the children of Masons and maintenance provision for widows in poor circumstances.

All information will be given to persons entitled by the District Grand Secretary in each District. The names and addresses of **District Grand Secretaries** are given below:—

D. G. S., Bengal.

G. H. Davis, 19, Park Street, Calcutta.

D. G. S., Bombay.

Khan Bahadur Palanji N. Davar, P.A.G.R., P.D.G.W, Freemasons' Hall, Ravelin Street, Fort, Bombay.

D. G. S., Burma.

E. Meyer, D.G.S., E.C., Rangoon.

D. G. S., Madras.

S. T. Srinivasa Gopala Chari, Freemasons' Hall, Egmore, Madras.

D. G. S., Punjab.

Mathra Das, Freemasons' Hall, Lahore.

Scottish Constitution.—For information regarding the Benevolent Funds application should be made to Arthur W. S. Wise, J.P., 17, Murzban Road, Bombay.

Scientific Surveys.

Botanical Survey.—The Botanical Survey Department of the Government of India is under the control of a Director, who is assisted by three other officers. They are engaged in the examination and identification of plants and the study of floras. The Director is also in charge of the cinchona plantations in Burma.

In connection with the general question of post-war industrial policy, the Government of India decided in 1916 that every effort should be made to extend the area under cinchona in India, and deputed Colonel A. T. Gage, late Director of Botanical Survey of India, to explore land suitable for cinchona cultivation. As a result of his recommendations made in 1918 large areas in the Tavoy District of Burma were reserved for cinchona cultivation, and the first plantations were started there in 1920. A programme was adopted for planting 500 acres annually which would produce 90,000 lbs. per annum from 1928 onwards. Owing unfortunately to excessive rainfall in 1921-22 this plantation was entirely washed away, and the Tavoy scheme had to be abandoned. A fresh area was selected, however, in the Mergui District of Burma, and plantations were started there in 1922. The cultivation of cinchona here is still in the experimental stage.

At the instance of the Retrenchment Committee the area to be planted during the first four years has been limited to 250 acres per annum, The Governments of Bengal and Madras are also at the instance of the Government of India extending their cinchona plantations, and it is proposed that Bengal should continue its sequence of planting 200 acres every year with cinchona, Madras 230 acres and the Government of India 250 acres annually.

The actual demand for the drug in India is difficult to estimate. Eight million cases of malaria fever go to the hospitals and dispensaries every year. If each of these is treated with 110 grains of quinine, which may be taken as the minimum for the cure of a paroxism, the demand for hospital and dispensary treatments alone would be 125,000 pounds a year. Patients do not get as much of the drug as they ought, because the cost of quinine is prohibitive. It is estimated that there are 100,000,000 sufferers from malaria who do not attend the hospitals. The potential demand is therefore somewhere between 125,000 pounds and 1,500,000 pounds. When the Italian Government, in 1903, made quinine a State industry and cheapened its retail price consumption in that country enormously increased and malaria mortality was reduced from 15,000 to 3,000 a year. The Public Health Commissioner with the Government of India says in a recent report that "it may be said that there is no question of the effective treatment of malaria in India until consumption of quinine approximates 500,000 pounds."

Geological Survey.—The ultimate aim for the Geological Survey of India is the preparation of a geological map of India upon the accuracy of which the solution of most geological problems ultimately depends. Maps accompany the reports on the various areas in the publications of the Department and a large amount of information is made available to the public. Such maps represent pioneer work which enables prospectors and mining engineers to cut short their preliminary investigations and to start where the Geological Survey has left off. During the preparation of the geological map and the general survey of the country mineral deposits of importance are frequently discovered. Such discoveries are published without delay and every endeavour is made to induce private firms to take up the exploitation of the mineral discovered. Collections of minerals, rocks and fossils are accumulated and exhibited in the public galleries of the Indian Museum, situated in the capital of Bengal. Some of the most interesting and scientifically valuable additions to the collections in recent years have been the remains of anthropoid apes of great age discovered at different places in the Siwalik Mountain chain. These mountains are a comparatively low range running parallel with the Himalayas for a great distance and at a short distance from them. They are in fact a huge bank of detritus washed down during the ages from the Himalayas. They are believed to have covered up in the course of their formation such a quantity of palæolithic remains as exists nowhere else in the world. The discoveries of skeletons and fossils hitherto made have been the result of washaways after heavy rains or of other accidental circumstances and there exists no organisation or systematised method for either prosecuting discovery or collecting what chance brings to light. The Geological Survey also undertakes the examination and identification, without fee, of any minerals, rocks and fossils sent in by private observers. The publications of the Survey include the Memoirs, Records and Palæontologia Indica.

Zoological Survey.—A scheme for the formation of a Zoological Survey on the basis of the Zoological and Anthropological Section of the Indian Museum, Calcutta, came into force in July, 1916. The proposals as sanctioned by the Secretary of State mainly are as follows:—"The headquarters of the Survey will be the Indian Museum. The scheme regarding the Zoological Survey entails the breaking up of the organisation now known as the Zoological and Anthropological Section of the Indian Museum into two parts, one of which will become a Government department under the title of the Zoological Survey of India, and will be primarily concerned with zoological investigation and exercise such advisory functions as may be assigned to it by Government, while the other part will remain as the office of the Trustees of

the Indian Museum and will be organised for the present on the lines laid down in the existing by-laws of the Museum. It will be the duty of the Zoological Survey to act as guardians of the standard zoological collection of the Indian Empire, and as such to give every assistance in their power both to officials and to others, in the identification of zoological specimens submitted to them, arranging, if requested to do so, to send collections to specialists abroad for identification in cases in which no specialist is available in India". The Zoological Survey is also responsible for the Anthropological collections in the Indian Museum and in 1927 the additional appointment on the Staff of an anthropologist was created. The Director of the Survey was Dr. Anandale until April, 1924, when he died—within a month of receiving the honour of Fellowship of the Royal Society. Dr. Baini Prasad was appointed Acting Director in his place and continued in that capacity until July, 1925, when Lt.-Col. R. B. Sewell, I.M.S., M.A., F.A.S.B., F.L.S., F.Z.S., was made Director.

Mammal Survey.—The Survey was instituted in the year 1912 with the object of making as complete a study as possible of the occurrence and distribution of Mammals in India, Burma and Ceylon, and with the further object of supplementing the collection of Indian Mammals at the Bombay Natural History Society's Museum and at the British Museum as well as at the Natural History Museums in India, the primary object of the Survey being the furtherance of our knowledge of Indian Mammalian Fauna. Up to 1891 Naturalists in India had to rely for information on Dr. Jerdon's "Mammals of India" published in 1874. In 1884 R. A. Sterndale published his Natural History of Indian Mammals a purely popular work which did not add much to Jerdon's book. In 1881 a memorial prepared by Dr. Slater, Hon. Secretary to the Zoological Society and signed by Darwin, Hooker, Huxley, and other well known scientists, was presented to the Secretary of State for India. The memorial recommended that a series of Volumes dealing with the Fauna of India should be prepared and Dr. Blanford should be appointed its Editor. The memorial resulted in the publication in 1888-1890 of the Volume on Mammals in the "Fauna of British India" Series and since 1891 this volume has been the standard work on *Indian Mammals.* Blanford's book was however based on the information then available and the shortcomings of the book have been revealed in the light of more recent research. Further knowledge in regard to distribution and classification and the discoveries of new species have rendered Blanford practically obsolete.

To remedy this defect, at the instigation of the authorities of the British Museum, the Bombay Natural History Society decided to institute what is now known as the Mammal Survey, Mr. W. S. Millard, then Hon. Secretary of that Society, issued in an appeal to its members to enable the Society to engage the services of trained European collectors so as to make a systematic collection of the mammals of India, Burma and Ceylon. The response to the appeal resulted in over a lakh of rupees being raised between 1911 and 1920, partly by subscriptions from the Society's members, contributions from Indian Princes, and grants from the Indian Government, the Government of Burma, Ceylon. Malay States, and the Provincial Governments, Subscriptions were also received from a few Learned Societies and Institutions in England and America. By the outbreak of the war the Survey had been carried on over large areas of the country, the districts covered being—In Western India a portion of Sind, the whole of Gujarat, Kutch and Kathiawar; the Southern Maharatta country and Kanara in Southern India; in Coorg and Mysore; in the centre large tracts of the Central Provinces and some districts of Bengal and Behar; in Northern India the Society's collectors had worked over Kumaun, Darjeeling and Sikkim and the Bhutan Duars. In Burma, collections were made along the Chindwin river, in Central Burma and in the Shan States, Pegu and a portion of Tennaserim. The whole of Ceylon was also systematically surveyed.

The material, which up to the outbreak of War comprised some 17,000 specimens, was forwarded to the British Museum where the collections were scientifically worked out by the late Mr. R. C. Wroughton, formerly Inspector General of Forests, Mr. Oldfield Thomas, F.R.S., Curator of Mammals at the British Museum, Mr. Martin C. Hinton and others. The results of their researches were published in a series of scientific papers in the journal of the Bombay Natural History Society. The enormous mass of material then collected resulted in the discovery of large numbers of new forms and species and by increasing our knowledge of the distribution of Indian Mammalia has enabled the revision of Blanford's Mammalia to be undertaken and early in 1921 the Secretary of State for India commissioned Mr. R. C. Wroughton, since deceased, and Mr. M. C. Hinton to undertake the work.

When demobilization rendered it possible the work of the Survey which had been in abeyance during the war was resumed and a collector, Mr. C. Primrose, was sent to Assam and the Mergui Archipelago and Mr. Oldfield Thomas has written very appreciatively of his work among those islands. Mr. Primrose then began working inland but owing to the impracticability of continuing his work in Burma during the monsoon, he was transferred to Gwalior where H. H. the Maharaja kindly accorded permission to work in his territories.

After working a portion of the Eastern Ghats the next move was to the Kangra District in the North-West Himalayas and then on to the Punjab Salt Range. Two other collectors worked in Southern India. Permission was once more obtained from the Nepal Government for a collector to resume the Survey work in that country The work in Nepal was brought to a successful close early in 1928 with a representative collection of interesting mammals and birds.

The Survey now has only one collector who is collecting in the foot hills of Himalayas and the Pindari Valley.

The Board of Scientific Advice.—This Board in accordance with a recommendation of the Inchcape Retrenchment Committee is in abeyance. It consisted of the heads of the Meteorological, Geological, Botanical, Forest, Survey, Agricultural and Civil Veterinary

Departments, together with such other scientific authorities as might from time to time be invited by the Government of India to serve upon it. It was established in 1902 to co-ordinate official scientific inquiry, to ensure that research work is distributed to the best advantage, and to advise the Government of India in prosecuting practical research into those questions of economic or applied science on the solution of which the agricultural and industrial development of the country so largely depends. The programme of investigation of the various departments were annually submitted to the Board for discussion and arrangement, and an annual report was published on the work done.

The Secretary to the Government of India (Department of Education, Health and Lands, was *ex-officio* President of the Board, which included the Director-General of Observatories, the Director of the Zoological Survey, the Surveyor-General of India, the Director Imperial Institute of Veterinary Research, Muktesar, the Inspector-General of Forests, the Agricultural Adviser to the Government of India, the Director of the Geological Survey, the Director-General, Indian Medical Service, the consulting Engineer to the Government of India, the Librarian, Imperial Library and the Director of the Botanical Survey of India who was Secretary to the Board of Scientific Advice.

The Universities Conference, representing all Indian Universities, which met in Simla in 1925, recommended the revival of the Board, but the technical officers of the Government of India were of a different opinion and the Board continues in abeyance.

The Indian Research Fund.—The progress of this Fund and its Association like the Board of Scientific Advice, was seriously affected by the policy of retrenchment enforced in pursuance of the recommendations of the Inchcape Committee. Scientific research work is rapidly developing in India. In 1911 the sum of 5 lakhs (£33,000) out of the surplus opium revenue was set aside as an endowment for research into epidemic diseases in connection with the Central Research Institute at Kasauli. It was hoped that this sum might be largely augmented by private subscriptions. An Indian Research Fund Association was constituted, and a good deal of work was undertaken. Its objects were defined as "the prosecution and assistance of research, the propagation of knowledge and experimental measures generally in connection with the causation mode of spread and prevention of communicable diseases." Fresh investigations into kala azar and cholera were inaugurated, and an officer was deputed at the expense of the Fund to study yellow fever in the regions where it is endemic, with a view to taking steps to prevent its introduction into India. A further grant of 6 lakhs (£40,000) was made to the Central Research Fund from the opium surplus of 1911-12. It was decided to devote to research and anti-malarial projects 5 lakhs (£33,000) a year from Imperial revenue commencing in 1913-14. A new periodical "The Indian Journal of Medical Research," was instituted in 1913 for publication four times annually, as the official organ of the Research Fund. The journal was designed to deal with every branch of research directly or indirectly connected with medical and sanitary science, and form a record of what was being done in India for the advance of this work. In 1922 it was decided to devote the capital funds at the disposal of the Association to the erection of an Imperial Medical Research Institute and to the formation of a fund for its endowments. In the same year valuable results were achieved by Dr. Nishi Kanta De, working in Calcutta on the chemistry of drugs used in treatment of leprosy and on the chemistry of the blood of lepers and resistent animals. The treatment of cancer, of influenza, of pneumonia, the histology and pathology of deficiency diseases and special problems concerning Indian calucidæ, kala azar, the action of quinine in malaria treatment were among the particular subjects of investigations specially dealt with by various research experts in 1922. Further substantial grants to the Research Fund have recently been made by Government.

Survey of India.—The work of the Survey of India Department falls under various heads, namely, the trigonometrical survey, topographical and forest surveys, special surveys and explorations, and map production. Cadastral surveys are now carried out by the Provincial Land Records and Settlement Departments.

In 1904 attention was drawn to the defective state of the **topographical survey maps,** and a Committee was appointed to report on the subject. To overtake the arrears of revisional survey and to secure that the map of India should be brought up-to-date and revised at proper intervals, they recommended a considerable increase of establishment and an increased expenditure of Rs. 2,10,000 a year for the next 25 years. They also made recommendations for altering the size and improving the quality of the maps. After further inquiry the Government of India decided that a scale of 1 inch to the mile would ordinarily be sufficient, reserved forests and special areas being surveyed on the scale of 2 inches to the mile, and the ½-inch scale employed for waste and barren tracts. The work of the Department has in recent years greatly been hampered by the general need for retrenchment in expenditure. On the other hand, its organisation has lately been improved by the creation of a new North-West Frontier Circle, under a separate Director, this being the addition of a fifth Circle to the four already existing for all India and Burma. A recent valuable development has been the employment of aviators for survey work from the air in some parts of the country.

The department is responsible for all topographical survey; for explorations and the maintenance of geographical maps of the greater part of Southern Asia; for geodetic work, including the main trigonometrical framework which extends in some cases far beyond the frontiers of India, and control networks of precise levelling based on tidal observatories, tidal predictions and the publication of Tide Tables for nearly 40 ports between Suez and Singapore, the Magnetic Survey, astronomical observatories with seismographic and meteorological records at Dehra Dun, and geodetic investigations of an international character, in regard to which India enjoys a unique position between the greatest highlands

of the world and a deep ocean extending to the Antarctic. Indian geodesy has thus disclosed by far the largest known anomalies of gravitational attraction in the earth's crust, which have led to some of the most important developments of modern geodetic research.

While expending on topographical and geodetic work all funds allotted by Imperial Revenues, the department is steadily developing the policy of aiding local surveys in various ways, on payment by those concerned. These miscellaneous operations include: all forest and Cantonment surveys and work for Boundary Commissions; many riverain, irrigation, railway and city surveys, and surveys of tea gardens, mining areas, &c., with a great deal of control levelling for them; miscellaneous administrative assistance and officers are given to the revenue surveys of various Provinces and States. The Printing offices do much work for other Government departments, such as printing special maps, illustrations for Archeological Reports, all diagrams for Patents, &c. The Mathematical Instruments Office gives valuable aid to all Government departments by ensuring a high standard of instrumental equipment, especially in connection with optical work, and by the manufacture and repair of high-class instruments, which would otherwise have to be imported from abroad.

The department is also responsible for all survey operations required by the Army, and has been rapidly developing measures to meet the greatly increased complexity of modern military requirements, especially in connection with air survey. The development of air surveys for various civil purposes is also receiving all possible encouragement and assistance, while the latest methods of stereo-photography are being studied experimentally.

Administration is by the Surveyor General under the Education, Health and Lands Department of the Government of India. Headquarter offices are at Calcutta under the Assistant Surveyor General, and there are seven Directors, one for each of the five Survey Circles into which the country is divided, one for the Geodetic Branch at Dehra Dun, and one for the Map Publication and other technical offices at Calcutta.

Indian Science Congress.—The Indian Science Congress was founded largely owing to the efforts of Prof. P. S. Macmahon and Dr. J. L. Simonsen. These two gentlemen worked jointly as Honorary General Secretaries of the Congress till 1921. The Asiatic Society of Bengal undertakes the management of the Congress finances and publishes annually the proceedings of the Congress. The objects are (1) to encourage research and to make the results generally known among science workers in India, (2) to give opportunities for personal intercourse and scientific companionship and thus to overcome to some extent one of the chief drawbacks in the life of workers in science in India, (3) to promote public interest in science; for this end the Congress is held at different centres annually, and evening lectures open to the public to from an important part of the proceedings of each Congress.

The Congress, which is progressive and vigorous, meets in January each year, the proceedings last for six days. The Head of the Local Government is Patron of the Congress; the Congress session is opened by a Presidential Address delivered by the President for the year. The President is chosen annually, the different sections being represented in turn. The sections are (1) Agriculture, (2) Physics and Mathematics, (3) Chemistry and Applied Botany, (4) Zoology and Ethnography, (5) Botany, (6) Geology, (7) Medical Research; when the sections meet separately each section is presided over by its own President also chosen annually. The mornings are devoted to the reading and discussion of the papers, the afternoons to social functions and visits to places of interests, in the evenings public lectures are delivered.

Posts and Telegraphs.

POST OFFICE.

The control of the Posts and Telegraphs of India is vested in an officer designated Director-General of Posts and Telegraphs who works in subordination to the Government of India in the Department of Industries and Labour. The superior staff of the Direction, in addition to the Director-General himself consists on the postal side of three Deputy Directors-General (who are officers of the rank of Postmaster-General), and six Assistant Directors-General (whose status is similar to that of Deputy Postmasters-General).

For postal purposes, the Indian Empire is divided into nine circles as shown below, each of the first eight is in charge of a Postmaster-General and the Sind and Baluchistan Circle is controlled by a Director, Posts & Telegraphs. Bengal and Assam, Bihar and Orissa, Bombay, Burma, Central, Madras, Punjab and North-West Frontier, United Provinces and Sind and Baluchistan. The Central Circle comprises roughly the Central Provinces and the Central India and Rajputana Agencies.

The Postmasters-General are responsible to the Director-General for the whole of the postal arrangements in their respective circles, with the exception of those connected with the conveyance of mails by railways and inland steamers which are entrusted to two officers bearing the designation of Deputy Postmaster-General, Railway Mail Service. All the Postmasters-General are provided with Assistant Postmasters-General while those in charge of the largest circles are also assisted by Deputy Postmasters- General. The nine Postal Circles and the jurisdictions of the two Deputy Postmasters-General, Railway Mail Service, are divided into Divisions, each in charge of a Superintendent of Post Offices or Railway Mail Service as the case may be and each Superintendent is assisted by a certain number of officials styled Inspectors.

Generally there is a head post office at the head-quarters of each revenue district and other post offices in the same district are usually subordinate to the head Office for purposes of accounts. The Postmasters of the Calcutta, Bombay, and Madras General Post Offices and of the larger of the other head post offices are directly under the Postmaster-General, The Presidency Postmasters, indeed, have one or more Superintendents subordinate to them. When the duties of the Postmaster of a head office become so onerous that he is unable to perform them fully himself a Deputy Postmaster is appointed to relieve him of some of them, and if still further relief is required, one or more Assistant Postmasters are employed. The more important of the offices subordinate to the head office are designated sub-offices and are usually established only in towns of some importance. Sub-offices transact all classes of postal business with the public, submit accounts to the head offices to which they are subordinate incorporating therein the accounts of their branch offices, and frequently have direct dealings with Government local sub-treasuries. The officer in charge of such an office works it either single-handed or with the assistance of one or more clerks according to the amount of business.

Branch offices are small offices with limited functions ordinarily intended for villages, and are placed in charge either of departmental officers on small pay or of extraneous agents, such as school-masters, shopkeepers, landholders or cultivators who perform their postal duties in return for a small remuneration.

The audit work of the Post Office is entrusted to the Accountant-General, Posts and Telegraphs, who is an officer of the Finance Department of the Government of India and is not subordinate to the Director-General. The Accountant-General is assisted by Deputy Accountants-General, all of whom, with the necessary staff of clerks, perform at separate headquarters the actual audit work of a certain number of postal circles.

In accordance with an arrangement which has been in force since 1883, a large number of sub-post offices and a few head offices perform telegraph work in addition to their postal work and are known by the name of combined offices. The policy is to increase telegraph facilities everywhere and especially in towns by opening a number of cheap telegraph offices working under the control of the Post Office.

The **Inland Tariff** (which is applicable to Ceylon and Portuguese India except as indicated below) is as follows :—

——	When the postage is prepaid.	When the postage is wholly unpaid.	When the postage is insufficiently prepaid.
Letters.	Anna.		
Not exceeding two and a half tolas ..	1	Double the prepaid rate (chargeable on delivery).	Double the deficiency (chargeable on delivery).
Every additional two and a half tolas or part of that weight	1		
Book and pattern packets.			
Every 5 tolas or part of that weight ..	½		

Postcards.

Single	½ anna.
Reply	1 „

(The postage on cards of private manufacture must be prepaid in full.)

Parcels (prepayment compulsory).

(*a*) Parcels not exceeding 440 tolas in weight:—

	Rs.	a.
Not exceeding 20 tolas	0	2
Exceeding 20 tolas but not exceeding 40 tolas	0	3
For every additional 40 tolas or part of that weight	3 annas.	

(*b*) Parcels exceeding 440 tolas in weight:—
Exceeding 440 tolas but not exceeding 480 tolas .. .. Rs. 3 0
4 annas for every additional 40 tolas or fraction thereof up to 800 tolas.

Registration is compulsory in the case of parcels weighing over 440 tolas.

These rates are not applicable to parcels for Portuguese India.

In the case of parcels for Ceylon a registration fee of 2 annas is chargeable on each parcel in addition to the rates shown above.

Registration fee.	Rs.	a.
For each letter, postcard, book or pattern packet, or parcel to be registered	0	2

Ordinary Money Order fees.

On any sum not exceeding Rs. 10 ..	0	2
On any sum exceeding Rs. 10 but not exceeding Rs. 25	0	4
On any sum exceeding Rs. 25 up to Rs. 600	0	4

for each complete sum of Rs. 25, and 4 annas for the remainder; provided that, if the remainder does not exceed Rs. 10, the charge for it shall be only 2 annas.

Telegraphic money order fees.—The same as the fees for ordinary money orders *plus* a telegraph charge calculated at the rates for inland telegrams for the actual number of words used in the telegram advising the remittance, according as the telegram is to be sent as an "Express" or as an "Ordinary" message.

In the case of Ceylon the telegraph charge is calculated at the rates shown below:—

Express—Rs. 2 for the first 12 words and 3 annas for each additional word.

Ordinary.—Re. 1 for the first 12 words and 2 annas for each additional word. Telegraphic money orders cannot be sent to Portuguese India.

Value-payable fees.—These are calculated on the amount specified for remittance to the sender and are the same as the fees for ordinary money orders.

Insurance fees.—For every Rs. 100 of insured value 2 annas.

As regards Portuguese India see Foreign Tariff.

Acknowledgment fee.—For each registered article 1 anna.

The Foreign Tariff (which is not applicable to Ceylon or to Portuguese India except in respect of insurance fees for parcels and parcel postage) is as follows:—

Letters.

To Great Britain and Northern Ireland other British Possessions and Egypt, including the Sudan.	2 annas for the first ounce and 1½ annas for each additional ounce or part of that weight.
To other countries, colonies or places.	3 annas for the first ounce and 1½ annas for every additional ounce or part of that weight.

Postcards, Single	1½ annas.
„ Reply	3 annas.

Printed Papers.—½ anna for every 2 ounces or part of that weight.

Business Papers.—For a packet not exceeding 12 ounces in weight .. 3 annas.

For every additional 2 ounces or part of that weight .. .. ½ anna.

Samples.—1 anna for first 4 ounces and ½ anna per 2 ounces thereafter.

Parcels.

(*i*) Parcels not exceeding 20 lbs. in weight and addressed to Great Britain and Northern Ireland are forwarded as mails to the British Post Office, the rates of postage applicable to such parcels being as follows:—

For a parcel—	Via Gibraltar Rs. a. p.
Not over 3 lbs.	1 8 0
Over 3 lbs., but not over 7 lbs. ..	2 12 0
„ 7 „ „ 11 „ ..	3 15 0
„ 11 „ „ 20 „ ..	6 6 0

These parcels are delivered by the post office and the postage paid carries them to destination.

(*ii*) Parcels which exceed 11 lbs. but which do not exceed 50 lbs. (the maximum allowed) in weight are forwarded from India through the medium of the P. & O.S.N. Co., and are delivered at destination under arrangements made by that Company. The postage charge applicable to such parcels is twelve annas for each pound, or fraction of a pound. The parcels are delivered free of charge *within a radius of one mile from the Company's Head Office in London*; if addressed to any place beyond that radius, carrier's charges are levied from the addressees on delivery. Parcels thus forwarded through the P. & O. S. N. Co. cannot be insured during transit *beyond* India, but must, if they contain coin, etc., be insured *during transit in India.* No acknowledgment of delivery can be obtained in respect of these parcels, nor can such parcels be transmitted to Great Britain and Northern Ireland under the value-payable system.

Limits of Weight.

Letters.—4 lbs. 6 oz.

Printed Papers and Business Papers—To Great Britain and Northern Ireland, and the Irish Free State, British Australasian Colonies, Hong-kong, the Straits Settlements, Togo (British), the Union of South Africa, Rhodesia, and the Bechuanaland Protectorate—5 lbs.

To Ceylon—No limit.

To all other destinations—4 lbs. 6 oz.

Samples—To Great Britain and Northern Ireland, and the Irish Free State, Hong-kong, the Straits Settlements, Togo (British), the Union of South Africa, Rhodesia, and the Bechuanaland Protectorate—5 lbs.

To Ceylon—200 tolas.

To all other destinations—1 lb. 2 oz.

Parcels.—11 lbs.

Limits of Size.

Letters—1½ feet length by 1½ feet in width or depth. If in form of roll, 2½ feet in length and 4 inches in diameter.

Printed Papers and Business Papers—To Ceylon—2 feet in length by 1 foot in width or depth.

To all other destinations—1½ feet in length by 1½ feet in width or depth.

If in form of roll, dimensions in all cases are 30 inches in length and 4 inches in diameter.

Samples.—To Great Britain and Northern Ireland, and the Irish Free State, Ceylon, Hong-kong, the Straits Settlements, the Union of South Africa, Rhodesia and the Bechuanaland Protectorate—2 feet in length by 1 foot in width or depth.

To all other destination—1½ feet in length by 8 inches in width and 4 inches in depth.

If in form of roll, dimensions in all cases are 1½ feet in length and 6 inches in diameter.

Money Orders.—To countries on which money orders have to be drawn in rupee currency, the rates of commission are the same as in the case of inland money orders.

To countries on which money orders have to be drawn in sterling, the rates are as follows :—

	Rs.	a.
On any sum not exceeding £1 ..	0	3
,, ,, exceeding £1 but not exceeding £2	0	5
,, ,, ,, £2 ,, ,, £3	0	8
On any sum exceeding £2 but not exceeding £4	0	10
,, ,, ,, £4 ,, ,, £5	0	12
,, ... £5	0	12

for each complete sum of £5 and 12 annas for the remainder, provided that if the remainde does not exceed £1, the charge for it shall be 3 annas; if it does not exceed £2, the charge for it shall be 5 annas; if it does not exceed £3, the charge for it shall be 8 annas; and if it does not exceed £4, the charge for it shall be 10 annas.

Insurance fees (for registered letters and parcels only)

For insurance of letters and parcels to Mauritius, Iraq and British Somaliland and of parcels to Portuguese India, the Seychelles and Zanzibar—

	Annas.
Where the value insured does not exceed Rs. 200	5
For every additional Rs. 200 or fraction thereof	5

For insurance of letters and parcels to Great Britain and Northern Ireland and to British Possessions and Foreign countries other than those mentioned above and for insurance of letters to the Seychelles and Zanzibar.—

	Annas
Where the value insured does not exceed £12	5
For every additional £12 or fraction thereof	5

Acknowledgment fee.—3 annas for each registered article.

Magnitude of business in Post Office.—At the close of 1927-28 there were 107,721 postal officials, 21,604 post offices, and 166,624½ miles of mail lines. During the year, 1,293 million articles, including 51 million registered articles were posted; stamps worth Rs. 60 millions were sold for postal purposes: over 38½ million money orders of the total value of Rs. 920 millions were issued, a sum of Rs. 273 millions was collected from tradesmen and others on V. P. articles; over 5·7 million insured articles valued at 1,632 millions of rupees were handled. Customs duty, aggregating over 8·3 million rupees was realised on parcels and letters from abroad, pensions amounting to Rs. 15·8 millions were paid to Indian Military pensioners and 13,600 lbs. of quinine were sold to the public. On the 31st March 1927, there were 2,606,701 Savings Bank accounts with a total balance of Rs. 327 millions and 58,586 Postal Life Insurance policies with an aggregate assurance of Rs. 113 millions.

TELEGRAPH DEPARTMENT.

Telegraphs.—Up to 1912 the telegraph system in India was administered as a separate department by an officer designated Director-General of Telegraphs who worked in subordination to the Government of India in the Department of Commerce and Industry. In that year it was decided to vest the control of Posts and Telegraphs in a single officer as an experimental measure with a view to the eventual amalgamation of the two Departments.

In pursuance of this policy an experimental amalgamation of the two services was introduced in the Bombay and Central Circles from the 1st July 1912. The fundamental principles of this scheme which followed closely the system in force in the United Kingdom and several other European countries were that the traffic and engineering work of the Telegraph Department should be separated, the former branch of work in each Circle being transferred to the

Postmaster-General assisted by a Deputy Postmaster-General and a suitable number of attached officers and the engineering branch being controlled by a Director of Telegraphs in charge of the two Circles. Subordinate to this officer there were several Divisional Superintendents who were assisted by a number of attached officers.

In 1914 the complete amalgamation of the two Departments was sanctioned by the Secretary of State and introduced from 1st April. The superior staff of the Direction, in addition to the Director-General himself, consists on the engineering side of a Chief Engineer, Telegraphs, with two Dy. Chief Engineers. For traffic work there is a Deputy Director-General, with an Assistant and an Assistant Director-General. On the 27th March 1920 a Controller of Telegraph Traffic was appointed to assist the Deputy Director-General in the inspection of offices and in controlling telegraph traffic. In the Circles the scheme which has been introduced follows closely on the lines of the experimental one referred to above. For telegraph engineering purposes India is divided up into five Circles, each in charge of a Director. For Burma special arrangements were considered necessary and the engineering work is in charge of the Postmaster-General who is a Telegraph officer specially selected for the purpose. These six Circles are divided into twenty-one Divisions each of which is in charge of a Divisional Engineer. On the 1st July 1922 Sind and Baluchistan circle was formed with its headquarters at Karachi. This circle is in charge of a Director Posts and Telegraphs. On the 31st March 1924 there were 7 Circles and 20 Divisions.

The telegraph traffic work is under the control of the Postmasters-General, each of whom is assisted by a Deputy Postmaster-General and a suitable staff of attached officers.

The audit work of the Telegraph Department is, like that of the Post Office, entrusted to the Accountant-General, Posts and Telegraphs, assisted by a staff of Deputy and Assistant Accountants-General.

Inland Telegrams and Tariff.—Telegrams sent to or received from places in India or Ceylon are classed as Inland telegrams. The tariff for inland telegrams is as follows:—

	For delivery in India. Private and State.		For delivery in Ceylon. Private and State.	
	Ex-press. Rs. a.	Ordi-nary. Rs. a.	Ex-press. Rs. a.	Ordi-nary. Rs. a.
Minimum charge.	1 8	0 12	2 0	1 0
Each additional word over 12..	0 2	0 1	0 3	0 2

The address is charged for.

Additional charges.

Minimum for reply-paid telegram .. .. / Notification of delivery	Minimum charge for an ordinary telegram.
Multiple telegrams, each 100 words or less	4 annas.
Collation	One half of the charge for an ordinary telegram of same length.

		Rs.
For acceptance of an Express telegram during the hours when an office is closed.	If both the offices of origin and destination are closed ..	2
	If only one of the offices is closed.	1
	If the telegram has to pass through any closed intermediate office an additional fee in respect of each such office	1

Signalling by flag or semaphore to or from ships—per telegram	The usual inland charge *plus* a fixed fee of 8 ans.
Boat hire	Amount actually necessary.
Copies of telegrams each 100 words or less	4 annas.

	For delivery in India. *Press.*		For delivery in Ceylon. *Press.*
	Ex-press. Rs. a.	Ordi-nary. Rs. a.	Ex-press. Rs. a.
Minimum charge ..	1 0	0 8	1 0
Each additional 6 words over 48 in respect of India, each additional four words over 32 in respect of Ceylon..	0 2	0 1	0 2

The address is free.

Foreign Tariff.—The charges for foreign telegrams vary with the countries to which they are addressed. The rates per word for private and state telegrams to countries in Europe are as follows:—

	Urgent Rs. a.	Ordi-nary. Rs. a.	Defer-red. Rs. a.	State (British. Govt.) Rs. a.
All countries in Europe (except France, *via* Eastern ..	3 0	1 0	0 8	0 8
Do. *via* Indo ..	3 0	1 0	0 8	—
Great Britain and Northern Ireland *via* I.R.T... ..	—	0 12	0 6	0 6
Most other countries in Europe *via* I.R.T.	—	1 0	0 8	0 8

Radio-Telegrams.—For radio-telegrams addressed to ships at sea from offices in India or Burma and transmitted *via* the coast stations at Bombay, Calcutta, Karachi, Madras, Port Blair or Rangoon the charge is ten annas per word in nearly all cases.

The following are the charges excluding supplementary charges for radiotelegrams from Offices in India or Burma transmitted *to ships at sea* from the coast stations mentioned in the preceding paragraph:—

	Total charge per word. Rs. a.
(1) All Government or Private Radio-telegrams, excepting those mentioned in (2) to (5) below ..	0 10
(2) British, Indian or Colonial Government Radio-telegrams to His Britannic Majesty's Ships of War or Royal Indian Marine Ships	0 6
(3) Private Radio-telegrams to His Britannic Majesty's Ships of War ..	0 6

(4) Radio-telegrams to Argentine, Belgian, Chilian, Danish, Dutch, Greek, Norwegian, Portuguese, Roumanian, Uruguayan and Yugo-Slav Ships:—

(*a*) *For ten words or less,* six annas per word, plus a fixed charge of Rs. 2-8-0.

(*b*) *For more than ten words,* ten annas per word.

(5) Radio-telegrams to Spanish and Swedish ships:—

(*a*) *For ten words or less,* six annas per word, *plus* a fixed charge of Rs. 1-14-0.

(*b*) *For more than ten words,* nine annas per word.

The sender of a radio-telegram may prepay a reply. He must insert before the address, the instruction "R. P." followed by mention in Rupees and annas of the amount prepaid *e.g.,* R.P. 7-8. This expression counts as one word.

DAILY LETTER-TELEGRAMS.

Daily Letter-Telegrams in plain language, which are dealt with telegraphically throughout are accepted on any day of the week, excluding Sundays and telegraph holidays, and are ordinarily delivered to the addressee after forty-eight hours. They are subject to the conditions prescribed for Deferred Foreign telegrams with certain exceptions as stated below.

The charge for a Daily Letter-Telegram is ordinarily a quarter of the charge for a full rate telegram of the same length and by the same route subject to a minimum charge equal to the charge for 20 words at such reduced rate including the indication DLT.

The late fee system does not apply to Daily Letter-Telegrams and such telegrams are not accepted during the closed hours of an office.

On Indian lines Daily Letter-Telegrams are transmitted after Deferred Foreign telegrams.

In the Daily Letter-Telegram service the special instructions relating to prepayment of replies are admitted other special services are inadmissible in DLT Telegrams.

Packed messages, *i.e.,* messages intended to be communicated to different persons, are not accepted in the text of Daily Letter-Telegrams. The charge for a week-end letter telegram to Great Britain and Northern Ireland is 3 annas a word *via* Eastern or Indo and 2½ annas a word *via* I.R.T. subject to a minimum of 20 words per telegram including the indication WLT.

TELEGRAPHS.

ABBREVIATED LIST OF RATES "*via* I. R. T."

	Ordy. Rs.a.	Defd. Rs.a.	D.L.T. Rs. a.
Europe.—			
Great Britain and Northern Ireland	0 12	0 6	0 3
Irish Free State	0 13	0 6½	0 3½
Belgium	0 13	0 6½	..
Holland, France ..	0 14	0 7	..
Germany, Switzerland, Italy, Norway, Spain ..	0 15	0 7½	..
Other Countries in Europe	1 0	0 8†	..
South Africa "Via Empiradio"—			
Union of South Africa and S. W. Africa ..	1 7	0 11½	0 6½
America:—			
Ontario, Quebec, Nova Scotia etc.	1 4	0 10	0 5½
Manitoba	1 9	0 12½	0 6½
Vancouver B.C.	1 10	0 13	0 7
New York, Boston, etc.	1 4	0 10	0 5½
Philladelphia, Washington etc.	1 6	0 11	0 5½
Chicago	1 8	0 12	0 6
San Francisco, Seattle etc.	1 10	0 13	0 7
Buenos Aires—*via* I.R.T. London Marconi ..	2 7	1 3½	..
Rio de Janeiro—*via* I.R.T. London Marconi .	2 5	1 2½	..
Valparaiso—*via* I.R.T. London Marconi ..	2 7	1 3½	..
Havana *via* I.R.T. London Marconi	1 12	0 14	..
Jamaica—*via* I.R.T. London Marconi ..	2 7	1 3½	..

† No deferred rate to Bulgaria, Russia, Yugoslavia and Turkey.

Week-end Letter Telegrams accepted on Saturday or any previous day of the week for delivery on the following Monday—2½ annas per word for Great-Britain and Northern Ireland.

Daily and Week-end Letter Telegrams—Minimum charge for 20 words.

Ordinary rate telegrams may be written in Code.

Telegrams are accepted at all Government Telegraph Offices.

Usual rules apply regarding Registration, Reply Paid, etc.

Full lists published in Post and Telegraph Guide.

Growth of Telegraphs.—At the end of 1897-98 there were 50,305 miles of line and 155,088 miles of wire and cable, as compared with 101,017 miles of line including cable and 532,859 miles of wire including conductors respectively, on the 31st March 1928. The numbers of departmental telegraph offices were 257 and 142 (including 6 Coast Radio offices, respectively) while the number of telegraph offices worked by the Post Office rose from 1,634 to 4,011.

The increase in the number of paid telegrams dealt with is shown by the following figures :—

		1897-98.	1927-28.
Inland ..	Private ..	4,107,270	15,206,370
	State ..	860,382	1,102,452
	Press ..	35,910	466,487
Foreign ..	Private ..	735,679	3,110,489
	State ..	9,896	32,379
	Press ..	5,278	55,857
		5,754,415	19,974,034

The outturn of the workshops during 1927-28 represented a total value of Rs. 25,69,109.

Wireless.—The total number of Departmental wireless stations open at the end of 1927-28 was twenty-four, *viz.*, Allahabad, Bombay, Calcutta, Delhi, Diamond Island, Jutogh, Karachi, Lahore, Madras (3 stations), Mhow, Nagpur, Peshawar, Poona, Port Blair, Quetta, Rangoon (3 stations), Sandheads (two pilot-vessels), Secunderabad, and Victoria Point of which only Port Blair and Victoria Point booked telegrams direct from the public.

The new Duplex high-speed service between Rangoon and Madras continued to work satisfactorily, the Baudot system being employed generally for this circuit. The Wheatstone system was also used for several months.

Telephones.—On the 31st March 1928 the number of telephone exchanges established by the Department was 280 with 17,564 straight line connections and 1,988 extension telephones. Of these exchanges, 138 were worked departmentally. The number of telephone exchanges established by Telephone Companies was 18 with 30,598 connections.

The total staff employed on telegraphs, telephones and wireless on the 31st March 1928 was 14,290.

Posts and Telegraphs.—The capital outlay of the Indian Posts and Telegraphs Deptt. during and to the end of the year ended 31st March 1928 was Rs. 65,30,651 and Rs. 13,25,91,266, respectively. The receipts for the year ended 31st March 1928 amounted to Rs. 10,82,71,046 and charges (including interest on capital outlay) to Rs. 11,08,86,184, the result being a net loss Rs. 26,15,138.

Sanitation.

The history of the sanitary departments in India goes back for about fifty years. During that period great improvements have been effected in the sanitary condition of the towns, though much remains to be done; but the progress of rural sanitation which involves the health of the great bulk of the population has been slow, and incommensurate with the thought and labour bestowed on the subject. "The reason lies in the apathy of the people and the tenacity with which they cling to domestic customs injurious to health. While the inhabitants of the plains of India are on the whole distinguished for personal cleanliness, the sense of public cleanliness has ever been wanting. Great improvements have been effected in many places; but the village house is still often ill-ventilated and over-populated; the village site dirty, crowded with cattle, choked with rank vegetation, and poisoned by stagnant pools; and the village tanks polluted, and used indiscriminately for bathing, cooking and drinking. That the way to improvement lies through the education of the people has always been recognised."

Of recent years the pace has been speeded up as education progressed, education developed, and funds were available. In a resolution issued in May 23rd, 1914, the Government of India summarised the position at that time, and laid down the general lines of advance. This resolution (*Gazette of India*, May 25th, 1914) should be studied by all who wish to understand the attitude of the Government of India towards sanitation prior to the passing of the Reform Act of 1919. It will be found

summarised in the Indian Year Book of 1922 (page 475 *et seq.*) and earlier editions. One of the greatest changes effected by the Reform Act of 1919 was the transfer of sanitation to the provinces making it a subject directly responsible to local control through Ministers. It is yet full early to attempt to indicate the effects of this change.

The Public Health Commissioner with the Government of India in a general review of health organisation in British India which he laid in January, 1928, before the Interchange Study Tour organised for Medical Officers of Health from the Far Eastern Countries by the Health Organisation of the League of Nations, concluded "that the State effort in regard to Health Organisation in British India is one of no mean importance, that it has evolved over a couple of centuries during which many mistakes in policy must be admitted, that it has provided the Officers and the stimulus necessary for laying the foundations of medical education, that it has tried to uphold the ethical standards of western medicine and that in whichever way it is regarded it is an effort of which no Government need be ashamed." He quoted, the remark of the Government of India in their Resolution of 1914, that "in the land of the ox cart one must not expect the pace of the motor car."

The Public Health Commissioner in his annual report for the year 1925 noted the introduction of the political element into health matters as a result of the Reforms and said that the improvements being introduced before the Reforms were in some provinces now in a fair way to maturing but that in other provinces "with less appreciation of the actual needs so far from adding to the organisation as they have found it have shown a desire to scrap even some of what they originally possessed." But, he says, "though the picture is neither bright nor the future rosy it is becoming increasingly evident that a considerable section of the Indian community is thinking seriously on these public health problems: amid much futile and destructive criticisms of State and municipal efforts here and there valuable and suggestive criticism can be met with which goes to prove my contention."

India's birth rate in 1925 was nearly twice that of England and Wales, her death rate was twice that of England and Wales and nearly three times that of New Zealand and her infantile mortality rate was nearly 2½ times that of England and Wales and nearly 4½ times that of New Zealand. "The information furnished for the great group of infectious diseases of world import, *i.e.*, plague, cholera, small-pox, yellow fever, typhus, malaria, and dysentery shows (says the Public Health Report already cited) that if we except typhus and yellow fever, India is one of the world's reservoirs of infection for the others and the main reservoir of infection for plague and cholera." The significance of these facts must, adds the Commissioner, be obvious to all who think: "Briefly their implication is that India's house, from the public health point of view, is sadly out of order and that this disorder requires to be attended to. It is not for India to say that so far as she is concerned prevention is impossible. If we think of the effect of sunlight on tubercle ridden children; of the effect of feeding on rickets, scurvy and beri-beri; of the way in which malaria, cholera, yellow fever, dangue, ankylostomiasis and filariasis can be and have been overcome we need have no fear in regard to India provided the necessary measures are put into operation."

The Public Health Commissioner in an address before the annual congress of the Far Eastern Association of Tropical Medicine, held in Calcutta in December, 1927, urged the importance of instituting a Central Ministry of Health which should be charged with the functions of co-ordinating the policies and activities of the departments concerned in the several provinces and with keeping them abreast of scientific progress. There is at present no Public Health Act for the whole of India, nor under existing administrative arrangements is one immediately possible, but the desirability of the Central Ministry of Health and of such an Act is likely to be urged in the course of the revision of the Constitutional Reforms now in progress.

Province.	Birth Rates (per mille).		Death Rates (per mille).	
	1926.	Previous 5 years.	1926.	Previous 5 years.
Belhi	40·99	..	42·86	31·45
Dengal	27·40	28·90	24·70	26·30
Bihar and Orissa	37·20	35·60	25·70	26·90
Assam	30·82	29·41	23·02	25·34
United Provinces	34·20	34·01	25·10	28·20
Punjab	41·67	40·80	36·52	31·31
N. W. Frontier Province	30·20	26·50	21·80	25·60
Central Provinces and Berar	46·03	41·48	34·33	32·74
Madras	36·10	31·70	25·60	22·50
Coorg	22·75	23·84	34·17	32·84
Bombay	37·05	34·17	28·55	25·36
Burma	27·59	28·36	20·92	20·97
Ajmer-Merwara	31·37	31·77	31·68	18·72
British India	34·77	33·35	26·76	26·53

Chief Causes of Mortality.—There are three main classes of fatal diseases, specific fevers, diseases affecting the abdominal organs, and lung diseases, Intestinal and skin parasites, ulcers and other indications of scurvy widely prevail. The table below shows the number of deaths from each of the principal diseases and from all other causes in British India and death rates per 1,000 during 1926:—

Province.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	All other causes.
Delhi ..	18 .03	244 .48	228 .45	12,069 24 .11	686 1 .37	5,615 11 .21	2,606 5 .19
Bengal Presidency.	56,106 1 .3	25,548 .5	.. ..	822,774 17 .7	24,978 .5	30,599 .6	183,202 4 .0
Bihar and Orissa ..	27,268 0 .8	34,873 1 .0	8,381 0 .2	584,444 17 .2	24,022 .7	7,034 .2	188,239 5 .4
Assam ..	10,275 1 .49	4,840 .70	.. ..	93,689 13 .67	9,787 1 .43	5,300 .77	33,896 4 .94
U. Provinces of Agra and Oudh.	6,166 0 .13	12,020 .26	57,297 1 .26	867,939 19 .13	12,120 .27	30,200 .67	153,082 3 .38
Punjab ..	87 .004	17,595 .86	108,287 5 .28	436,156 21 .26	11,181 .54	57,426 2 .80	118,660 5 .79
N. W. F. P.	.. ..	777 .36	638 .30	38,221 17 .90	169 .08	1,452 .68	5,178 2 .43
C. P. & Berar	4,565 0 .33	3,644 .26	6,486 .47	252,609 18 .16	36,658 2 .63	40,251 2 .89	133,442 9 .59
Madras Presidency.	24,407 0 .6	10,957 .3	2,143 .05	337,945 8 .3	91,758 2 .2	85,602 2 .1	495,717 12 .1
Coorg ..	2 .01	1 .01	11 .07	4,441 27 .11	206 1 .26	343 2 .09	5 .95 3 .64
Bombay Presidency	73 .00	3,922 .20	9,866 .51	222,466 11 .61	34,158 1 .78	103,038 5 .38	173,741 9 .07
Burma ..	6,182 2	2,339 .22	2,906 .27	72,790 6 .73	10,428 .96	11,638 1 .08	120,176 11 .10
Ajmer Merwara.	115,645 .48	306 .61	6 .01	12,633 25 .50	142 .45	266 .53	2,337 4 .71
British India	138,151 .57	85,986 .36	117,717 .49	4,636,264 15 .06	208,412 .86	326,557 1 .35	1,477,337 6 .12
1925-26 ..	.. ..	117,066 .48	196,249 .81	3,758,176 15 .56	256,293 1 .06	378,814 1 .57	1,615,871 6 .69

The Public Health Commissioner in his annual review shows that the outstanding data concerning public health in the year 1926 are briefly as follows :—

(1) The birth rate rose from 33 .65 per mille in 1925 to 34 .77 in 1926.

(2) The death rate rose from 24 .72 in 1925 to 26 .76 in 1926.

(3) The infantile death rate rose from 174 in 1925 to 189 in 1926.

The death rates of other countries in 1926 were: England and Wales 70, Canada (ex- Quebec) 102, U.S.A. 73, Japan (1922) 166.

He shows that taking the year as a whole, the rainfall averaged 6 per cent. above normal, while the cold weather rainfall of January and February was in large defect in N-W India, which is ordinarily the chief region of winter rains. The chief features of the S-W monsoon season were the weakness of both the currents in June and their more than usual activity in the other three months.

Births in British India numbered 8,395,679, or 270,271 more than in 1925, the increase being shared by all provinces except Delhi, Bengal and Ajmer Merwara. All provinces except Bengal, Coorg, Burma and Ajmer Merwara showed an increased birth-rate as compared

with the quinquennial mean. The proportion of male births to female throughout British India was 108, against 110 in 1925, 108 in 1924 and 1923 and 109 in 1922.

Birth ratios exceeded death ratios in all provinces except Delhi, Coorg and Ajmer Merwara. Bombay (8 .50), the N. W. F. P. (8 .4) and Assam (7 .80) were among the big birth increases.

Deaths numbered 6,460,610, compared with 5,967,918 in the preceding year, an increase of 492,692. The death rate was 26 .76 against 24 .72 in 1925 and a quinquennial mean of 26 .53. The urban death rate was 32 .49 against 29 .65 and the rural rate 26 .21 against 24 .30.

Of the total mortality, 1,587,091 deaths or 24 .6 per cent. occurred within the first year of life against 1,416,983, or 23 .7 per cent in 1925. (Corresponding figure for England and Wales 11 .3 per cent. in 1925 and 10 .7 in 1926). The infantile death rate calculated on the births recorded was 189 per mille against 174 in 1925 and 189 in 1924. Every province provided an increase except Coorg. In all British India 47 .2 per cent. of the infantile births occurred during the first month of life, against 49 .58 per cent. in 1925. This equals 89 per mille live births (total infantile mortality in England and Wales, 70 per mille). The total number of deaths under one week was 334,390, or 55 .43 per mille of live births. Compared with 1925, this figure shows an increse of 23,799 deaths under one week. The ratio per thousand of live births has increased everywhere except in the United Provinces and Coorg.

The Public Health Commissioner publishes what he terms an interesting table compiled by the Executive Health Officer, Bombay city, which shows that of 8,200 infantile deaths there during 1926 "infantile debility and malformations, including premature births" accounted for 3,703 and respiratory diseases for 2,644. He expresses agreement with a report by the Director of Public Health in Bengal, which states, "The callous indifference and ignorance to laws of hygiene and sanitation, the ingrained conservatism and the woeful fatalism of the masses can only be removed byan extensive and intensive propaganda. The effects of public health legislation would amount to very little if the ground work is not completed by propaganda: people must understand before they can be made to adopt any health legislation." He also quotes the following from the report of the Director of Public Health in the Madras Presidency, "The decrease (in the number of maternity and child welfare centres from 58 to 53) is most disappointing in view of the great necessity for a wide expansion of the activities carried on by these centres. It is a matter of great regret that little has been done by local authorities in organising measures for relief of mothers and infants......"

THE HEALTH OF THE ARMY.

British.—The average strength of British Troops, R. N. and R.A.F. 59,372 on the strength in India during 1925 was 60,097 as compared with 60,097 in 1925. There were also on the strength 5,341 women and 7,257 children. The statistics of sickness also take account of pensioners and others not on the strength. The following table shows the main facts as regards the health :—

—	Average Strength.	Admissions to Hospital.		Deaths.		Invalids sent Home.		Invalids Discharged in India.		Average Constantly. sick.	
		No.	Ratio per 1,000.	No.	Ratio per 1,000.	No.	Ratio per 1,000.	No.	Ratio per 1,000.	No.	Ratio per 1,000.
Officers	2,574	1,738	675.2	16	6.22	51	19.81	..	..	60.33	23.44
Other Ranks ..	56,798	36,893	149.5	171	3.01	907	15.97	3	0.05	1,758.6	30.96
Women	5,341	2,942	466.6	21	3.93	89	16.66	1	0.19	87.56	16.39
Women Parturition	..	786	..	..	..	..	..	..	..	42.15	..
Children	7,257	2,822	388.9	122	16.81	25	3.44	..	..	93.65	1.290
R.N., R.A.F., & Pensioners ..	..	4,155	..	..	..	..	..	..	..	..	..
Others	..	50	..	..	..	..	..	..	..	..	..

The health statistics of Officers and other ranks for the quinquennial periods 1910-14, 1915-19 and 1920-24 are given, with those for 1925 and 1926 separately for purposes of comparison:—

	Admissions.		Invalids.		Deaths.	
	Officers.	Other Ranks.	Officers.	Other Ranks.	Officers.	Other Ranks.
1910-14	567.5	567.2	16.30	7.03	5.14	4.5
1915-19	1,053.0	881.7	60.98	29.91	10.54	8.8
1920-24	676.7	791.9	20.99	18.91	6.71	5.9
1925	607.6	628.6	18.02	17.38	5.15	2.8
1926	675.2	649.5	19.81	16.02	6.22	3.0

The principal causes of invaliding to the United Kingdom were:—

Inflammation of middle ear	347
Mental diseases	39
Pulmonary tuberculosis	34
Valvular disease of the heart	53
Disordered action of the heart ..	36
Epilepsy	22
Multiple neuritis	20

Nineteen cases of multiple neuritis were taken from Aden.

The average number constantly in hospital was 1,758.60, or 30.96 per 1000 of the strength, compared with 31.41 in 1925, 32.69 in 1924 and 29.68 in 1913.

The average sick time to each soldier was 11.30 days and the average duration of each case 17.40 days. The corresponding figures were 11.46 and 18.24 in 1925, 11.97 and 18.18 in 1924 and 10.83 and 18.66 in 1913.

Men numbering 78,708, or 1,385.8 per mille of the strength, were treated as out patients, with an average daily number under treatment of 1,093.59, or 19.26 per 1,000.

The combined ratio constantly sick in hospital and under treatment as out-patients was 50.22 per 1000 of the strength, compared with 50.32 in 1925 and 54.55 in 1924.

As in former years the preponderance of disease due to the bites of mosquitoes and sand-flies shows the importance of preventive measures directed against them. So runs the report of the Public Health Commissioner with the Government of India. He adds that a large number of the admissions for inflammation of areolar tissue are also attributable to the same cause.

The fall in the incidence of malaria in the Northern Command which the statistics reflect was from 306.3 per 1000 in 1925 to 268.6 in 1926 but was more than counterbalanced by an increase in the Western Command from 155.4 per 1000 in 1925 to 314 in 1926. "The civil population in the Western Command area suffered heavily from malaria in the autumn of 1926 and the troops on manoeuvres were heavily infected."

Indian.—The outstanding feature of the statistics for 1925 in regard to the Indian Army was that the ratios per 1,000 for admissions, deaths and average constantly sick were in each case a record low figure in the annals of the Indian Army. The following table shows the main health statistics of officers and other ranks for the quinquennial periods 1915-19 to 1920-24 and those for 1925 and 1926:—

Period.	Admissions		Invalids.		Deaths.	
	Officers.	Other Ranks.	Officers sent Home.	Other Ranks Discharged.	Officers.	Other Ranks.
1915-19 ..	882.4	788.2	**	23.6*	8.29	16.81
1920-24 ..	698.3	593.2	3.65	18.25*	6.67	8.01
1925 ..	480.1	336.8	5.70	12.5*	5.22	4.01
1926 ..	607.7	388.6	4.49	11.6*	4.99	3.75

* Figures not available.

The number admitted to hospital was 52,517, or 388.6 per 1000 of the strength, compared with 356.8 in 1925 and 531.7 in 1913. The increase in the admission rate over 1925 was due in part to an order that all cases of malaria were to be admitted to hospital. (In previous years a certain number of light cases were treated in barracks). Malaria was the chief cause of admission to hospital, being responsible for 15,542 cases, against the next highest figure of 4,944, which was of cases admitted on account of local injuries. Deaths were 507, or 3.75 per 1000 of the strength, compared with 4.01 per 1000 in 1925 and 4.01 in 1913. It is the lowest death-rate ever recorded.

The average number constantly sick was in hospital 2,082.52, or 15.41 per 1000 of the strength, compared with 15.04 in 1925, 18.05 in 1924 and 21.4 in 1913. The average sick time to each soldier was 5.62 days and the average duration of each case 14.47 days. The number of men treated as out-patients was 151,918 or 1,124.1 per 100 of strength. The number constantly sick in hospital and under treatment as outpatients was in the ratio of 29.61 per 1000 of strength, compared with 26.54 in 1925 and 33.35 on 1924.

CHILD WELFARE MOVEMENT.

Amongst the most pressing problems of India's health is that presented by the appalling infant mortality. It has been calculated that every year no fewer than 2 million Indian babies die, while many others survive only to grow weak and feeble from unhygienic surroundings during infancy. A noteworthy feature has been the further progress of the infant welfare movement, which owes much to the All-India Maternity and Child Welfare League initiated by Lady Chelmsford and also to the Indian Red Cross Society, which aims at gradually establishing a network of child welfare centres in most of the larger towns in India. The institution of an all India Baby Week, an undertaking to which Her Excellency the Countess of Reading has devoted great and successful enthusiasm has also given a stimulus to the work and promises to be an important perennial aid to its progress. In all the great centres of population, work is now being done for the training of midwives, for the instruction of mothers and for the care of babies. Training centres for Indian and Anglo-Indian women have been opened in order to spread the elements of infantile hygiene to other parts of India. Most hopeful sign of all, Indian ladies are beginning to interest themselves in this work in large numbers. But such is the magnitude of the field, that a consistent widespread effort on a scale hitherto impossible must be undertaken, if any appreciable reduction is to be made in the appalling mortality of young children. The admirable work done year by year by the National Association for supplying Female Medical Aid to the Women of India is recognised by the Government of India, which subsidises this organisation with a grant of Rs. 3,70,000 a year for the maintenance of the Women's Medical Service of Indian.

Centres of Activity.—The Child Welfare Directory gives the following list of places where the movement is already at work:

Bombay.—The centre of much active and enthusiastic welfare work; the Lady Willingdon Maternity Homes near the people's chawls being unique of their kind in India. The Bombay Infant Welfare Society founded by Lady Lloyd has already established 8 Infant Welfare Centres where prenatal, maternity and child welfare work is being carried on.

Poona.—The work carried out by the Seva Sadan Society of Poona deserves special mention in this connection. Child welfare centres have been established in several places throughout the Presidency and are in charge of Public Health Nurses trained by the Seva Sadan Society. Certain of these Child Welfare centres are subsidized by the Bombay Branch of the Red Cross.

Surat.—The Henderson Ophthalmic Scheme for treating Ophthalmia Neonatorum and stemming "the enormous amount of preventible and curable blindness that is laying its shadow over the health, happiness and usefulness of this great portion of our Empire."

Bijapur.—Mr. Henderson, I.C.S., has now started the same beneficent work for blind babies as in Surat.

Delhi.—Work was started in 1914 by two lady health visitors brought out from England by the Government of India. Their salaries are now met by the Delhi Municipality, a substantial grant being paid towards them by Government; three infant welfare centres have been established and a comprehensive scheme for the training and supervision of indigenous *dais* is carried on. A training school for health visitors and midwife supervisors has been established in connection with this scheme and is financed by the Lady Chelmsford League. All particulars may be obtained from the Secretary Lady Reading Health School, Viceregal Estates, Simla (and Imperial Secretariat, Delhi).

Madras.—Under the Provincial Branch of the Lady Chelmsford League and of the Red Cross Society a number of Infant Welfare Centres have been opened in the City, also a school for training health visitors under Mrs. Chinappi, M.B., the Medical Superintendent of the Co-operative Midwives Scheme, by means of which trained midwives are provided for the City and much antenatal, maternity and infant welfare work is carried on. There are also local centres of both the Red Cross and the Lady Chelmsford League in the Madras mofussil.

Punjab.—The Punjab Branch of the Lady Chelmsford League was founded in 1921 and has established an Infant Welfare Centre and a school for training health visitors in Lahore under two health visitors brought from England. Its object is to establish child welfare centres with a trained health visitor in charge of each district.

United Provinces.—Infant Welfare centres exist in the following places :—Agra, Allahabad, Bareilly, Cawnpore, Dehra Dun, Gonda, Ghazipur, Lucknow. Other places are also taking up the work, and decrease in Infant mortality is noted as a result of the work in many places.

Bengal.—Work is undertaken by the Corporation of *Calcutta*, and by the Indian Red Cross Society in that town. The latter body is now also financing a Health School for the training of workers. A centre at *Titaghur* financed by Thos. Duff & Co., Ltd., cares for the infants of the operatives in the Jute Mills. A flourishing centre exists at *Dacca* where excellent work is being done.

Sind.—Karachi has two trained Health Visitors as well as 8 nurses, and there is a large amount of maternity work. Hyderabad is noted specially for its work among indigenous midwives.

Central Provinces.—In Nagpur city the work is being carried on by the Municipality very successfully. The Red Cross has also opened a centre in Civil Lines.

Rajputana.—Ajmer is the only centre at present.

N. W. F. P.—Dera Ismail Khan has a flourishing work, much appreciated by the people. Peshawar centre has had to be closed for want of a suitable worker.

Baluchistan.—A centre was established in Quetta in 1922, and has done steady work.

The health statistics of Officers and other ranks for the quinquennial periods 1910-14, 1915-19, and 1920-24 are given, with those for 1925 and 1926 separately for purposes of comparison :—

	Admissions.		Invalids.		Deaths.	
	Officers.	Other Ranks.	Officers.	Other Ranks.	Officers.	Other Ranks.
1910-14	567.5	567.2	16.30	7.03	5.14	4.36
1915-19	1,053.0	881.7	60.98	29.91	10.54	8.81
1920-24	676.7	791.9	20.99	18.91	6.71	5.24
1925	607.6	628.6	18.02	17.38	5.15	2.89
1926	675.2	649.5	19.81	16.02	6.22	3.01

The principal causes of invaliding to the United Kingdom were :—

- Inflammation of middle ear 347
- Mental diseases 39
- Pulmonary tuberculosis 34
- Valvular disease of the heart .. 53
- Disordered action of the heart .. 36
- Epilepsy 22
- Multiple neuritis 20

Nineteen cases of multiple neuritis were taken from Aden.

The average number constantly in hospital was 1,758.60, or 30.96 per 1000 of the strength, compared with 31.41 in 1925, 32.69 in 1924 and 29.68 in 1913.

The average sick time to each soldier was 11.30 days and the average duration of each case 17.40 days. The corresponding figures were 11.46 and 18.24 in 1925, 11.97 and 18.18 in 1924 and 10.83 and 18.66 in 1913.

Men numbering 78,708, or 1,385.8 per mille of the strength, were treated as out patients, with an average daily number under treatment of 1,093.59, or 19.26 per 1,000.

The combined ratio constantly sick in hospital and under treatment as out-patients was 50.22 per 1000 of the strength, compared with 50.32 in 1925 and 54.55 in 1924.

As in former years the preponderance of disease due to the bites of mosquitoes and sand-flies shows the importance of preventive measures directed against them. So runs the report of the Public Health Commissioner with the Government of India. He adds that a large number of the admissions for inflammation of areolar tissue are also attributable to the same cause.

The fall in the incidence of malaria in the Northern Command which the statistics reflect was from 306.3 per 1000 in 1925 to 268.6 in 1926 but was more than counterbalanced by an increase in the Western Command from 155.4 per 1000 in 1925 to 314 in 1926. "The civil population in the Western Command area suffered heavily from malaria in the autumn of 1926 and the troops on manoeuvres were heavily infected."

Indian.—The outstanding feature of the statistics for 1925 in regard to the Indian Army was that the ratios per 1,000 for admissions, deaths and average constantly sick were in each case a record low figure in the annals of the Indian Army. The following table shows the main health statistics of officers and other ranks for the quinquennial periods 1915-19 to 1920-24 and those for 1925 and 1926 :—

Period.	ADMISSIONS		INVALIDS.		DEATHS.	
	Officers.	Other Ranks.	Officers sent Home.	Other Ranks Discharged.	Officers.	Other Ranks.
1915–19 ..	882.4	788.2	**	23.6*	8.29	16.81
1920–24 ..	698.3	593.2	3.65	18.25*	6.67	8.01
1925 ...	480.1	336.8	5.70	12.5*	5.22	4.01
1926 ..	607.7	388.6	4.49	11.6*	4.99	3.75

* Figures not available.

The number admitted to hospital was 52,517, or 388.6 per 1000 of the strength, compared with 356.8 in 1925 and 531.7 in 1913 The increase in the admission rate over 1925 was due in part to an order that all cases of malaria were to be admitted to hospital. (In previous years a certain number of light cases were treated in barracks). Malaria was the chief cause of admission to hospital, being responsible for .5,542 cases, against the next highest figure of .,944, which was of cases admitted on account of local injuries. Deaths were 507, or 3.75 per 1000 of the strength, compared with 4.01 per 1000 in 1925 and 4.01 in 1913. It is the lowest death-rate ever recorded.

The average number constantly sick was in hospital 2,082.52, or 15.41 per 1000 of the strength, compared with 15.04 in 1925, 18.05 in 1924 and 21.4 in 1913. The average sick time to each soldier was 5.62 days and the average duration of each case 14.47 days. The number of men treated as out-patients was 151,918 or 1,124.1 per 100 of strength. The number constantly sick in hospital and under treatment as outpatients was in the ratio of 29.61 per 1000 of strength, compared with 26.54 in 1925 and 33.35 on 1924.

The public Health Commission makes the same report in regard to sand—flies and mosquitoes as causing disease by their bites as he does in his report about British troops.

The annual returns for Followers are not compiled in the same way as those concerning troops and comparisons between the two categories are therefore impossible.

MORTALITY FROM WILD ANIMALS.

The total number of people killed by wild animals in British India during 1926 amounted to 1987 against 1972 in 1925 and 2578 in 1924.

Tigers were responsible for 875 deaths, leopards for 183, wolves for 367, bears for 96, elephants for 56 and hyenas for 15. Deaths by tigers continued to be highest in Madras, from leopards in the C. P. and Berar, from wolves in the U. P. from bears in B. and O. and from elephants in Assam. Of the 393 deaths from "other animals" about 41 are ascribed to wild pig and 151 to crocodiles and alligators. The highest number of deaths from wild animals cocurred in the U. P. The mortaility from elephants showed a marked decrease. The mortality was less than in the previous year in most provinces.

Deaths from snakebite increased from 19,258 to 19,718.

Wild animals to the number of 23,689 were reported destroyed during 1926 and of these 128 were tigers, 4,247 leopards, 2,633 bears and 3,025 wolves . A sum of Rs. 1,40,061 was paid in rewards against Rs 1,55,667 in 1925. The number of snakes destroyed in India proper increased from 41,004 to 46,012 and the rewards paid for their destruction were Rs. 1,615 against Rs. 1,579 in 1925.

MEDICAL INSTITUTIONS.

There were in existence in British India at the end of 1926 4,189 State, public, local fund and private aided civil hospitals and dispensaries as compared with 3,956 in 1925, an increase of 233.

The number of patients treated was 44,610,196 (including 766,855 in-patients) against 41,135,578 (including 732,975 in-patients) in 1925. The increase was noticeable in all provinces except the U. P. and Calcutta city, the increase in some provinces apparently being due to the opening of additional dispensaries. The number of operations rose from 1,711,695 in 1925 to 1,871,495 in 1926.

There are in British India 8 medical colleges and 23 medical schools.

LEPROSY IN INDIA.

It is exceedingly difficult to give anything approaching an accurate estimate of the total number of lepers in the Indian Empire to-day. The census figures of 1921 give the total as 102,513, as against 109,094 in 1911. But it is doubtful if this figure represents anything more than the more advanced cases and possibly a majority of this number are the begging and pauper lepers who are seen all over the country. Dr. E. Muir, M.D.,F.R.C.S., the Leprosy Research Worker at the Calcutta School of Tropical Medicine, says that "we think that it would not be an over estimate to put down the number of lepers in India somewhere between a half and one million."

Early in the year 1924, the British Empire Leprosy Relief Association was constituted in England with H. R. H. The Prince of Wales as Patron, the Viscount Chelmsford as Chairman of the General Committee and H. E. the Viceroy of India as one of the Vice-Presidents. Following its formation and in view of the good results being obtained from the newest treatment of leprosy, H. E. the Viceroy felt that the time was auspicious for the inauguration and carrying on of an earnest campaign with the object of ultimately stamping out leprosy from India.

His Excellency invited certain gentlemen representing various interests to form an Indian Council of the Association, which he formally inaugurated at a public meeting in Delhi on the 27th January 1925.

His Excellency is its President and Sardar Saheb Balwant Singh Puri, Honorary Secretary of the Association.

A special research worker on a Salary of Rs. 1,200-75-1,500 has been appointed for five years who is working under Dr. E. Muir, M.D., F.R.C.S., in the School of Tropical Medicine and Hygiene, Calcutta, where doctors are trained in the special treatment of leprosy.

The whole of the first year of the Indian Council was occupied with preliminary organising work and very early, in its second year, 1926, it began to put its work into operation. The Central Committee is under the finally adopted scheme vested with the task of promoting research, preparing and publishing propaganda material and arranging for the training of doctors in the diagnosis and treatment of leprosy. Measures for the accommodation and treatment of leprous patients and other schemes of pure local interest are the concern of Provincial Committees working as agents of the Indian Council. One of the early decisions of the Council therefore related to the apportionment of the revenue of the Fund as between the Central and Provincial Governments. It was decided that the total revenue, less the income of contributions received from Ruling Princess which according to their wishes, has been ear-marked for the promotion of research under the direction of the Central Committee, should so be allocated that the amount distributed to Provincial Committees should not be less than 50 per cent. of the total.

Two circulars were early in 1926 issued to the Provinces setting forth in detail the approved plan of action for the Central and Provincial Committees. In pursuance of the proposals made in it permanent local Committees to administer the funds to be allotted to them from

the head quarters and to direct and control the anti-leprosy campaign in their respective provinces were formed and by the close of the year all the Provinces had constituted branches. In order to secure uniformity in certain broad principles relating to the anti-leprosy campaign to be undertaken by the Provincial Committees and with a view to its conformity with the latest scientific information about the nature of the disease, the Indian Council issued in the early part of 1926 a "Memorandum on the method of conducting the anti-leprosy campaign in India." This document sought to bring out the following main points which according to the latest scientific researches should be the bases upon which all efforts ultimately to eradicate leprosy must rest:—

(1) Pauper lepers form only a small fraction of the leper population, and the disease is common among all classes of the community.

(2) Segregations is not the most appropriate method of dealing with lepers, for

(*a*) financially it would be impossible;

(*b*) any attempt to impose forcible segregation would drive patients, particularly those who are suffering from the earlier stages of the disease, to conceal their misfortune, and, as has been the case where such means have been adopted, only the more advanced and obvious lepers would be segregated.

(3) The majority of the advanced cases are not highly infectious and are less amenable to treatment, while the early cases in which the disease has made but little outward manifestation, can be controlled by treatment.

(4) The strongest hope of stamping out the disease lies in providing facilities for the treatment of early cases.

The Indian Council, therefore, while it did not desire to minimise the usefulness of homes and asylums for the care of lepers, strongly recommended that the efforts of the Provincial Committees should, for the present at least, be concentrated upon the establishment of dispensaries to serve the following objects:—

(*a*) to induce patients to come forward at an early stage in the hope of recovery instead of hiding their malady till it becomes more advanced, more infectious and less remediable; and so

(*b*) to shut off the sources of infection as the number of infectious cases will continually tend to diminish and the opportunities for infecting the next generation will become fewer.

The Provincial Committees have all placed the question of the training of doctors and the starting of treatment centres where facilities will be available for the proper diagnosis and treatment of the disease, in the forefront of their programmes and their resources have in many cases been supplemented by local Governments by the grant of substantial financial assistance.

A general appeal for funds was made on the formation of the Indian Council and closed in January 1926. Realisations produced Rs. 20,00,000. This was invested and forms the capital of the Association, to which it yields an annual revenue of Rs. 1,21,000.

The latest report of the Indian Council shows that its work is vigorously being prosecuted, that scientific research is continually illuminating the general problem and that the beginnings of genuine progress towards the eradication of leprosy in India are being made. One of the first particular tasks to which the Council has directed itself is the discovery of the extent of prevalence of the disease in India. The method of inquiry adopted is to establish a treatment centre in a leprous district and to approach the census problems there through the offer of free treatment. The survey was experimentally begun in Manbhum district of Bihar and Orissa, then in the Bankura district of Bengal and thereafter in three areas in the Sonthal Parganas in the same part of India and later still in the Chin Hills, in Burma.

"In the first three districts the incidence of leprosy was found to be between four and five times that given by the census figures but it cannot be claimed that even this survey has revealed the total incidence, as second visits to certain villages generally resulted in the discovery of even more cases . . . . In the one high school 11 cases of leprosy were found among 300 boys." The Council deduce that there are at least half a million people in India suffering from leprosy." It was discovered in one area of the Sonthal Parganas surveyed that: "Hiranpur has 1,197 lepers per 100,000 of population: out of 163 villages 106 are affected with leprosy." And it is to this hot, bed of leprosy that people from most of the districts of Bengal come to buy their cattle for cultivation and the Sonthals and Pariahs find a ready market for their lac to spend money on liquor."

"It was observed that if a village consists of people of one caste the number of lepers is very small; where two or more castes are gathered in one village, but each caste occupies a separate quarter, the amount of leprosy is greater, but the highest incidence is in villages where different castes live side by side. In the wild uplands of Singhbhum, Ranchi, Hazaribagh and the north west of the Sonthal Parganas, the aboriginals, who live a free and natural life, are found to be almost free from leprosy but as one passes down from these uplands and jungle tracts towards the plains and the aboriginal comes in contact with more advanced civilisation and mixes with the semi-aboriginal a veritable hotbed of leprosy is found. In such areas as Bankura, Manbhum and the southern part of the Sonthal Parganas sexual promiscuousness and venereal disease, famine and bad food become important factors ...."

Considerable progress was made during 1926 in the treatment of leprosy and four courses of lectures for medical men were held at the School of Tropical Medicine in Calcutta. They were attended by 104 doctors, who came from different provinces in the following proportions:—Punjab 2, Madras 8, Bihar and Orisa 14, Central Provinces 30, Bengal 17. Burma 6, Bombay 1, Assam 6, United Provinces 3, Western India States 14, Central India 10. The total was made up by one doctor from Egypt, 2 from West Africa and 1 from Greece, these students from overseas having been sent by their respective Governments for special study before acting as leprosy experts in their own countries. The Calcutta school has during the past three years thus trained 184 doctors.

CHILD WELFARE MOVEMENT.

Amongst the most pressing problems of India's health is that presented by the appalling infant mortality. It has been calculated that every year no fewer than 2 million Indian babies die, while many others survive only to grow weak and feeble from unhygienic surroundings during infancy. A noteworthy feature has been the further progress of the infant welfare movement, which owes much to the All-India Maternity and Child Welfare League initiated by Lady Chelmsford and also to the Indian Red Cross Society, which aims at gradually establishing a network of child welfare centres in most of the larger towns in India. The institution of an all India Baby Week, an undertaking to which Her Excellency the Countess of Reading has devoted great and successful enthusiasm has also given a stimulus to the work and promises to be an important perennial aid to its progress. In all the great centres of population, work is now being done for the training of midwives, for the instruction of mothers and for the care of babies. Training centres for Indian and Anglo-Indian women have been opened in order to spread the elements of infantile hygiene to other parts of India. Most hopeful sign of all, Indian ladies are beginning to interest themselves in this work in large numbers. But such is the magnitude of the field, that a consistent widespread effort on a scale hitherto impossible must be undertaken, if any appreciable reduction is to be made in the appalling mortality of young children. The admirable work done year by year by the National Association for supplying Female Medical Aid to the Women of India is recognised by the Government of India, which subsidises this organisation with a grant of Rs. 3,70,000 a year for the maintenance of the Women's Medical Service of Indian.

Centres of Activity.—The Child Welfare Directory gives the following list of places where the movement is already at work:

Bombay.—The centre of much active and enthusiastic welfare work; the Lady Willingdon Maternity Homes near the people's chawls being unique of their kind in India. The Bombay Infant Welfare Society founded by Lady Lloyd has already established 8 Infant Welfare Centres where prenatal, maternity and child welfare work is being carried on.

Poona.—The work carried out by the Seva Sadan Society of Poona deserves special mention in this connection. Child welfare centres have been established in several places throughout the Presidency and are in charge of Public Health Nurses trained by the Seva Sadan Society. Certain of these Child Welfare centres are subsidized by the Bombay Branch of the Red Cross.

Surat.—The Henderson Ophthalmic Scheme for treating Ophthalmia Neonatorum and stemming "the enormous amount of preventible and curable blindness that is laying its shadow over the health, happiness and usefulness of this great portion of our Empire."

Bijapur.—Mr. Henderson, I.C.S., has now started the same beneficent work for blind babies as in Surat.

Delhi.—Work was started in 1914 by two lady health visitors brought out from England by the Government of India. Their salaries are now met by the Delhi Municipality, a substantial grant being paid towards them by Government; three infant welfare centres have been established and a comprehensive scheme for the training and supervision of indigenous *dais* is carried on. A training school for health visitors and midwife supervisors has been established in connection with this scheme and is financed by the Lady Chelmsford League. All particulars may be obtained from the Secretary Lady Reading Health School, Viceregal Estates, Simla (and Imperial Secretariat, Delhi).

Madras.—Under the Provincial Branch of the Lady Chelmsford League and of the Red Cross Society a number of Infant Welfare Centres have been opened in the City, also a school for training health visitors under Mrs. Chinappi, M.B., the Medical Superintendent of the Co-operative Midwives Scheme, by means of which trained midwives are provided for the City and much antenatal, maternity and infant welfare work is carried on. There are also local centres of both the Red Cross and the Lady Chelmsford League in the Madras mofussil.

Punjab.—The Punjab Branch of the Lady Chelmsford League was founded in 1921 and has established an Infant Welfare Centre and a school for training health visitors in Lahore under two health visitors brought from England. Its object is to establish child welfare centres with a trained health visitor in charge of each district.

United Provinces.—Infant Welfare centres exist in the following places:—Agra, Allahabad, Bareilly, Cawnpore, Dehra Dun, Gonda, Ghazipur, Lucknow. Other places are also taking up the work, and decrease in Infant mortality is noted as a result of the work in many places.

Bengal.—Work is undertaken by the Corporation of *Calcutta*, and by the Indian Red Cross Society in that town. The latter body is now also financing a Health School for the training of workers. A centre at *Titaghur* financed by Thos. Duff & Co., Ltd., cares for the infants of the operatives in the Jute Mills. A flourishing centre exists at *Dacca* where excellent work is being done.

Sind.—Karachi has two trained Health Visitors as well as 8 nurses, and there is a large amount of maternity work. Hyderabad is noted specially for its work among indigenous midwives.

Central Provinces.—In Nagpur city the work is being carried on by the Municipality very successfully. The Red Cross has also opened a centre in Civil Lines.

Rajputana.—Ajmer is the only centre at present.

N. W. F. P.—Dera Ismail Khan has a flourishing work, much appreciated by the people. Peshawar centre has had to be closed for want of a suitable worker.

Baluchistan.—A centre was established in Quetta in 1922, and has done steady work.

Central India.—Indore has a centre financed by the Red Cross Society.

Bangalore.—Has an enthusiastic Committee with two Health Centres.

Indian States.—Kolhapur, Baroda and Jaipur have undertaken definite Child Welfare work, while trained midwives are employed in a number of others.

So far all the schemes have devoted their attention to combating the prejudices of the mothers in respect of new-born children. In a land of so many languages and superstitions progress will necessarily be slow and India has yet to decide whether she will work intensively and try to rear a few well developed children as far as adolescence or extensively attempt to bring a large number of infants through the first critical months, only to have them perish at a later stage from the many ills that childhood is heir to in a land of great poverty, under-nourishment, epidemics and famine. In Western lands the Child Welfare Movement has no more marked characteristic than its inability to stop expanding. Its ramifications know no bounds. Its inevitable corollaries are endless, and like the banyan tree it will no doubt in India also develop innumerable fresh roots, medical supervision, dental clinics, better housing, open air playgrounds, etc., etc. But these are not yet. Its preliminary task is to educate the mothers of India to the enormity of allowing two million babies to perish every year and to convince them of the equally important fact that a high death rate always spells also a high damage rate of sickly, under-developed, incompetent citizens.

INDIAN RED CROSS SOCIETY.

When the war first broke out, what is generally termed Red Cross work was undertaken in India and Mesopotamia by the St. John Ambulance Association and by a number of provincial organisations working on independent lines. From August 1916, the central work was taken over by the Indian Branch of the Joint War Committee of the Order of St. John of Jerusalem and the British Red Cross Society. The final report of that Committee shows that up to June 1920 its total receipts amounted to Rs. 1,77,85,716 of which some 17 lakhs had been contributed by the British Red Cross Society. It had spent about 67 lakhs in Mesopotamia, nine lakhs on the Afghan War and Waziristan Expedition; in Mesopotamia and India combined it had spent on Red Cross objects in all about 117 lakhs.

It closed its career in June 1920 under the following circumstances. In the summer of 1919, an invitation had been received to join the International League of Red Cross Societies, having for its object the extension of Red Cross work in the sphere of purely civil activity. Though there was then no formally constituted Red Cross Society in India, the invitation was accepted, thus giving India a distinct position in a world wide League of humanitarian societies. A Bill to constitute an Indian Red Cross Society was introduced by Sir Claude Hill in the Imperial Legislative Council in March 1920, and duly passed into law as Act XV of 1920. This Act handed over the balance of the Joint War Committee to the new Society, and authorised it not only to direct the utilization for war purposes of the capital funds at its disposal but also to devote the interest, as far as possible, for civil purposes. As contemplated in the Act of Constitution of the Society, its activities are completely decentralized, and are being carried on through twenty-two Provincial and State Branches under which there are numerous sub-branches.

The **objects** on which the funds of the Society may be spent are—

1. The care of the sick and wounded men of His Majesty's Forces, whether still on the active list or demobilised.
2. The care of those suffering from Tuberculosis, having regard in the first place to soldiers and sailors, whether they have contracted the disease on active service or not.
3. Child welfare.
4. Work parties to provide the necessary garments, etc., for hospitals and health institutions in need of them.
5. Assistance required in all branches of nursing, health and welfare work, ancillary to any organisations which have or may come into being in India and which are recognised by the Society.
6. Home Service Ambulance Work.
7. Provision of comforts and assistance to members of His Majesty's Forces, whether on the active list or demobilised.

The Society has five grades of subscribing Members, namely, Honorary Vice-Presidents, Patrons, Vice-Patrons, Members and Associate Members. Their respective subscriptions are Rs. 10,000, Rs. 5,000, Rs. 1,000, Rs. 12 annually or a consolidated payment of Rs. 150 and anything between Re. 1 and Rs. 5 annually or consolidated payment of Rs. 50. In the end of 1927 there were 9,943 members of these various grades.

To stimulate interest for the aims and objects of the Society amongst the future generation of people, a Junior Red Cross movement has been instituted which embraces the Student population. The Punjab Provincial Branch has taken the lead in furthering this movement and has during the last two years enrolled no less than 29,956 members.

Constitution.—His Excellency the Viceroy is President of the Society. The Managing Body ordinarily consists of a Chairman to be nominated by the President and 25 members of the Society of whom 12 are the Vice-Presidents nominated by Provincial or State Branches;

8 elected by the Society at the Annual General Meeting from among the members of the Society and 5 nominated by the President.

The present Chairman of the Managing Body is the Hon'ble Sir Henry Moncrieff Smith, Kt., C.I.E., I.C.S., and the Organising Secretary Colonel Bhola Nauth, C.I.E., I.M.S. (Retd.).

Finances.—The operations of the Joint War Committee were brought to a close in June 1926 with a capital investment of the face value of Rs. 56,33,000 and Rs. 8,01,500-8-6 in floating and fixed deposit accounts. The Society has since invested further funds in various securities and its finances in the end of December 1927, stood at a capital investment of the face value of Rs. 67,53,000-0-0. The income derived from the capital of the Society, (which is 3¼ lakhs at present) after providing for certain liabilities of the Central Society, is distributable under the Act to the Provincial Branches in proportion to their contributions to the Central "Our Day" Fund. A sum of Rs. 2,70,000-0-0 was so distributed to the Provincial Branches under this arrangement during the year 1927.

St. JOHN AMBULANCE ASSOCIATION,

(Indian Council.)

The St. John Ambulance Association was founded in 1877, by the Order of the Hospital of St. John of Jerusalem in England, and has for its objects:—

(*a*) The instruction of persons in rendering First Aid in cases of accident or sudden illness and in the transport of the sick and injured;

(*b*) The instruction of persons in the elementary principles and practice of nursing, and also of hygiene and sanitation, especially of a sick room;

(*c*) The manufacture, and distribution by sale or presentation, of ambulance material, and the formation of ambulance depots in mines, factories, and other centres of industry and traffic;

(*d*) The Organisation of Ambulance Corps, Invalid Transport Corps, and Nursing Corps;

(*e*) And generally the promotion of instruction and carrying out of works for the relief of suffering of the sick and injured in peace and war independently of class, nationality, or denomination.

An Indian Council of the Association was constituted in 1910. It has since issued 1,45,572 certificates of proficiency in First Aid, Home Nursing, Home Hygiene and Sanitation and 6,610 tokens such as Vouchers, Medallions, Labels and Pendants for special proficiency in those subjects. The object of the Association is not to rival, but to aid, the medical man, and the subject matter of instruction given at the classes qualifies the pupil to adopt such measures as may be advantageous pending the doctor's arrival, or during the intervals between his visits.

In 1927 the Indian Council spent Rs. 52,160-0-0 in furthering its objects and closed the year with Govt. securities of the face value of Rs. 70,000. The Association has five grades of members, namely, Patrons, Honorary Councillors, Life Members, Annual Members and Annual Associates. Their respective subscriptions are Rs. 1,000, Rs. 500, Rs. 100, Rs. 5, and Rs. 2.

Their Excellencies Lord and Lady Irwin and Field-Marshal Sir William Birdwood as President, Lady President and Chairman, respectively, with 17 members form the Indian Council. The general business of the Indian Council is conducted by an Executive Committee of which the Hon'ble Sir Henry Moncrieff Smith, Kt., C.I.E., I.C.S., is the Chairman, and Colonel Bhola Nauth, C.I.E., I.M.S. (Retd.), the General Secretary.

INSANITY AND MENTAL HOSPITALS IN INDIA.

The accommodation for the treatment in British India of persons who suffer from mental disorders is still very inadequate. In the Indian States, the condition of affairs is even worse, for, with the sole exception of Mysore State which has a small and highly archaic "mental hospital" at Bangalore, there are no mental hospitals in existence so that persons suffering from all forms of mental disease are confined in the Jails where, of course, no provision exists for any kind of treatment. According to the last Census (1921) out of a total population of 318,942,480 (India and Burma) there are 88,305 persons insane, making a proportion of insane to sane of 3 per every 10,000. In the United Kingdom the proportion of insane to sane is roughly 40 per 10,000, while in New Zealand it is as much as 45 per 10,000. In reviewing these figures it must be borne in mind that those of the United Kingdom and New Zealand include the "feeble-minded" an item that is not included in the figures for British India.

INDIA.

Provinces, States and Agencies.	General population.			Insane population.		
	Male.	Female.	Total.	Male.	Female.	Total.
Provinces under British Administration.	139,243,123	131,707,310	270,950,433	44,673	28,234	72,907
States and Agencies ..	24,752,431	23,239,616	47,992,047	9,478	5,920	15,398
Total for all India ..	163,995,554	154,946,926	318,942,480	54,151	34,154	88,305

For the care of the 88,305 insanes of India and Burma there exists accommodation in mental hospitals for 6,750 hence only one person in ten out of the total insane population can obtain accommodation in institutions which exist especially for their care and treatment.

The following table gives the number of mental hospitals in each province during 1927, the total population of each institution and the number discharged cured and died :—

Province.	No. of Mental Hospitals.	Admitted and readmitted during the year	Total Population of Mental Hospitals.			Discharged cured.	Died.	Daily average.		Criminal Lunatics.
			Males.	Fe-males.	Total.			Strength.	Sick.	
Asam	1	66	410	95	505	21	47	438·47	59·35	246
Bihar and Orissa ..	2	364	1,535	398	1,933	206	53	1,604·49	74·68	614
United Provinces ..	3	779	1,561	412	1,973	174	106	1,274·83	155·03	425
Punjab	1	397	982	262	1,244	132	102	889·88	73·63	207
Central Provinces ..	1	87	389	95	484	33	19	410·96	20·37	135
Bombay	5	608	..	..	2,109	237	171	1,534·20	93·7	226
Madras	3	469	1,155	357	1,512	143	80	1,105·29	135·89	194
Burma	2	276	1,111	169	1,280	88	58	1,052·55	44·06	564
Total ..	18	3,046	..	..	11,040	..	636	8,305·67	656·71	2,601

It will be observed that there is now no mental hospital in Bengal. Insanes from this province are treated in one or other of the two mental hospitals at Ranchi. All Mental hospitals are under the direct control of the Provincial administrative medical officers except the European Mental Hospital at Ranchi which is controlled by a Board of Trustees presided over by the Commissioner of Chota-Nagpur. The so-called "Central" Mental Hospitals, that is to say, the Mental Hospital at Madras, North Yeravda (Bombay), Lahore (Punjab), Agra (United Provinces of Agra and Oudh) and Rangoon (Burma), as well as the two Mental Hospitals at Ranchi (one for Europeans and Americans and one for Asiatics and Africans) are administered by whole-time medical officers who are usually trained alienists. The Administration of the remaining Mental Hospitals in British India and Burma, lies with the Civil Surgeon of the locality in which they happen to be situated. It is probably true to state that only one Mental Hospital in the whole of India can claim any pretension to be up-to-date as regards organisation, staffing and equipment and that is the Mental Hospital for Europeans at Ranchi. All the others are for the most part over-crowded and under-staffed, thus rendering anything approaching treatment on modern lines out of the question. The only province in India which has so far displayed some appreciation of the importance of bringing the prevention and treatment of mental disorders into line with conditions in civilised countries is Madras. The local Government of this province has achieved a notable advance in its attitude towards mental disorders by providing, in the construction of the new General Hospital at Madras, accommodation for the treatment of early cases of mental diseases.

As regards the incidence of insanity among the various races of India as well as the incidence of insanity in relation to occupation, no reliable information is available in view of the comparative paucity of cases in proportion to the general population that come under observation. On the other hand the incidence by age is shown fairly well in the Census Report of 1921 which is as follows :—

INDIA

AGE.	Insane.		Distribution of the insane by age per 10,000 of each sex.	
	Male.	Female.	Male.	Female.
YEARS				
0– 5	651	484	121	142
5–10	2,905	1,882	539	553
10–15	4,098	2,733	761	803
15–20	4,366	3,076	810	904
20–25	5,518	3,379	1,024	993
25–30	6,861	3,582	1,273	1,053
30–35	7,231	3,849	1,342	1,131
35–40	5,651	2,949	1,049	867
40–45	5,316	3,486	987	1,025
45–50	3,332	2,157	618	634
50–55	3,132	2,492	581	733
55–60	1,465	1,036	272	305
60–65	1,683	1,471	....	....
65–70	602	439	....	....
70 and over	1,070	1,006	....	....
Unspecified	270	133	....	....
Total for all India	54,151	34,154	623	857

A further result of the widespread ignorance and apathy both official and non-official, towards psychiatry and its cognate interests, is the lack of any provision for the care and treatment of mentally defective children. In 1925, the Hon'ble Haroon Jaffer moved the Council of State to recommend to the Governor-General in Council that the Provincial Governments be asked to investigate the best means of dealing quickly and adequately with cases of mental defectives. A discussion followed which was remarkable only for the ignorance of the subject displayed by all who took part in it. The motion was eventually withdrawn.

Finally there is still a lamentable failure everywhere to appreciate the intimate association of crime with mental disorder and the extreme paucity of medical men throughout the whole of India with any real knowledge of mental diseases leave the decision of questions involving what the law terms "responsibility" in crime in the hands of medical men who are in no sort of sense "experts". In other words the current ideas both as regards the theory and practice of dealing with insanity and crime in India can only be described as archaic.

(See also "Insanity in India" by Colonel G. F. W. Ewens, I.M.S., and "Lunacy in India" by Colonel A. W. Overbeck-Wright, M.D., D.P.E., I.M.S., and Colonel H. P. Jago Shaw's book.)

INDIA.

Provinces, States and Agencies.	General population.			Insane population.		
	Male.	Female.	Total.	Male.	Female.	Total.
Provinces under British Administration.	139,243,123	131,707,310	270,950,433	44,673	28,234	72,907
States and Agencies ..	24,752,431	23,239,616	47,992,047	9,478	5,920	15,398
Total for all India ..	163,995,554	154,946,926	318,942,480	54,151	34,154	88,305

For the care of the 88,305 insanes of India and Burma there exists accommodation in mental hospitals for 6,750 hence only one person in ten out of the total insane population can obtain accommodation in institutions which exist especially for their care and treatment.

The following table gives the number of mental hospitals in each province during 1927, the total population of each institution and the number discharged cured and died :—

Province.	No. of Mental Hospitals.	Admitted and readmitted during the year	Total Population of Mental Hospitals.			Discharged cured.	Died.	Daily average.		Criminal Lunatics.
			Males.	Fe-males.	Total.			Strength.	Sick.	
Asam	1	66	410	95	505	21	47	438·47	59·35	246
Bihar and Orissa ..	2	364	1,535	398	1,933	206	53	1,604·49	74·68	614
United Provinces ..	3	779	1,561	412	1,973	174	106	1,274·83	155·03	425
Punjab	1	397	982	262	1,244	132	102	889·88	73·63	207
Central Provinces ..	1	87	389	95	484	33	19	410·96	20·37	135
Bombay	5	608	..	..	2,109	237	171	1,534·20	93·7	226
Madras	3	469	1,155	357	1,512	143	80	1,105·29	135·89	194
Burma	2	276	1,111	169	1,280	88	58	1,052·55	44·06	564
Total ..	18	3,046	..	..	11,040	..	636	8,305·67	656·71	2,601

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National Association for Supplying Medical Aid by Women to the Women of India.

The National Association for Supplying Medical Aid by Women to the women of India was founded by the Countess of Dufferin in 1886, the object being to open women's hospitals and women's wards in existing hospitals; to train women doctors, nurses and midwives in India; and to bring these out when necessary from Europe. An endowment fund of about 6 lakhs was obtained by public subscription. In addition Branches were formed in each Province, each Branch having its own funds and each having a number of Local Committees and Zenana Hospitals affiliated to it.

The Central Fund gives grants-in-aid to several Provincial Branches; it gives scholarships to a number of women students at the Medical schools of Bombay, Calcutta, Madras and Delhi; it gives post-graduate scholarships for study in the United Kingdom. It has in the past brought from England a certain number of European medical women. It has assisted by grants-in-aid the building of a number of zenana hospitals in different parts of India. It has affiliated to it 13 Provincial Branches and a number cf Local Committees.

The Government of India subsidize the Countess of Dufferin's Fund to the extent of Rs. 3,70,000 per annum to maintain a Women's Medical Service for India—this service consists of 44 officers, with a training reserve of 8 doctors and a Junior service of 7 assistant surgeons. Medical women either British or Indian holding registrable British qualifications are eligible for the senior service.

The President is H. E. Lady Irwin, C.I., The Hon. Secretary is the Surgeon to H.E. the Viceroy, and the Secretary Dr. A. C. Scott, C.M.O., W.M.S.

THE WOMEN'S MEDICAL SERVICE FOR INDIA.

This Service is included in the National Association for supplying medical aid by women to the women of India, generally known as the Countess of Dufferin's Fund and is administered by the Executive Committee and Council of that Fund. The Government of India has so far allotted the sum of £25,000 per annum towards its maintenance. The present sanctioned cadre is forty-four first class medical women, with a training reserve of 8 women graduates in medicine of Indian Universities. Recruitment of the service is made (*a*) in India by a medical sub-committee of the Council which includes the Director-General, Indian Medical Service, the Honorary Secretary to the Council and the Chief Medical Officer, Women's Medical Service; (*b*) in England, by a sub-committee, including a medical man and two medical women conversant with conditions in India. These sub-committees perform the duties of a medical board examining candidates for physical fitness, and for return to duty after invaliding.

The Council determines what proportions of the members of the Service is to be recruited in England and in India respectively. In the original constitution of the Service, duly qualified medical women who are in the service of, or who have rendered approved service to, the Countess of Dufferin's Fund, are to have the first claim to appointment, and thereafter special consideration is to be paid to the claims of candidates who have qualified in local institutions and of those who are natives of India.

Qualifications.—The qualifications are that the candidate must be (*a*) a British subject resident in the United Kingdom or in a British Colony or in British India, or a person resident in any territory of any Native Prince or Chief under the suzerainty of His Majesty exercised through the Governor-General of India or through any Governor or other officer subordinate to the Governor-General of India. (*b*) Must be between the ages of twenty-four and thirty at entry. (*c*) She must be a first-class medical woman, *i.e.*, she must possess a medical qualification registrable in the United Kingdom under the Medical Act, or an Indian or Colonial qualification registrable in the United Kingdom under that Act: but this condition does not apply at the original constitution of the Service to medical women in charge of hospitals who, in the opinion of the Council, are of proved experience and ability. (*d*) The candidate must produce a certificate of health and character. But the Council reserves the power to promote to the service ladies not possessing the above qualifications, but who have shown marked capacity. Members of the Service are required to engage for duty anywhere in India. After one year of probation has been satisfactorily passed their appointments are confirmed. The services of officers may be lent to Local or Municipal bodies, or to special institutions, which may be responsible for whole or part of the pay.

Pay.—The rates of pay are as follows:—

1st	to	3rd	year	Rs.	450	per month.
4th	to	6th	,,	,,	500	,,
7th	to	9th	year	Rs.	550	per month.
10th	to	12th	,,	,,	600	,,
13th	to	15th	,,	,,	650	,,
16th	to	18th	,,	,,	700	,,
19th	to	21st	,,	,,	750	,,
22nd	to	24th	,,	,,	800	,,
25th	and	after	,,	,,	850	,,

also an overseas allowance of Rs. 100 per month to those below 12 years' service and Rs. 150 per month to those of 12 years' service and over. Every officer of the Service shall pass an examination in such vernacular as the Executive Committee shall appoint within the first three years of her service, and shall receive no increment after that period until such examination has been passed. In addition

furnished quarters are provided free of rent or a house rent allowance to be determined by the Provincial Committee may be granted in lieu of it.

Officers of the Service are permitted to engage in private practice provided it does not interfere with their official duties, and the Provincial Committee has the power to determine whether such duties are thus interfered with. Except in very special cases retirement is compulsory at the age of fifty-five. An officer recruited in England, whose appointment is not confirmed, or who is dismissed, is granted an allowance sufficient to pay her passage to England.

Leave Rules.—(*a*) Casual Leave, which is occasional leave on full pay for a few days, and is not supposed to interrupt duty. (*b*) Leave on average pay is granted up to 2-11 of an officer's period on duty, according to Fundamental Rules. More than eight months' leave on average pay is not granted at one time. (*c*) Study leave may also be granted up to twelve months during the whole service. An allowance of 12 sh. per day is granted in addition to ½ average pay during study leave. (*d*) Extraordinary leave at any time at the discretion of the Executive Committee. (*e*) Leave not due may be granted subject to the following conditions:—(*i*) on medical certificate, without limit of amount; and (*ii*) otherwise than on medical certificate, for not more than three months at any one time and six months in all, reckoned in terms of leave on average pay. (*f*) The maximum period of continuous absence from duty on leave granted otherwise than on medical certificate is 18 months. (*g*) When an officer returns from leave which was not due and which was debited against her leave account, no leave will become due to her until the expiration of a fresh period spent on duty, sufficient to earn a credit of leave equal to the period of leave which she took before it was due. There are no allowances during extraordinary leave. A doctor appointed in England receives a sum of £100 to cover her passage and incidental expenses. There are also allowances to cover the cost of journeys by rail and road.

There is also a Provident Fund, each member contributing monthly thereto ten per cent. of her salary, the Association contributing an equal amount, and each subscriber's account being granted interest on the amount standing to credit at the rate of 4 per cent. per annum, "or at such rate as the Council can invest without risk to the funds of the Association."

An officer loses the contributions made to her account by the Association with the interest thereon if she resign (except on account of ill-health) before completing five years' service or in the event of dismissal. On retirement after approved service the sum which has accumulated to the credit of the subscriber is handed over to her.

Free Passages.—Officers of the Women's Medical Service are granted free return passages corresponding to those granted under the Lee Concessions to officers of all-India services. The maximum number of return passages granted during an officer's entire term of service must not exceed four, the first falling due after 4 years service.

Victoria Memorial Scholarships.

The Victoria Memorial Scholarships Fund was organised by Lady Curzon in 1903, in order to secure a certain amount of improvement in the practising dais of India. A sum of about 6½ lakhs was obtained by public subscription, and centres were organised in each Province to carry out the objects of the Fund. Over 2,000 midwives have been trained in addition to large numbers who have been partially trained. Of late years the Fund has done much to pave the way for the registration and supervision of indigenous dais. It has also done much propaganda work.

LADY CHELMSFORD ALL-INDIA LEAGUE FOR MATERNITY AND CHILD WELFARE.

By 1920 it had come to be realised that the Dufferin organization was not wide enough in that it did not include what may be called the field of preventive medicine. Lady Chelmsford decided to face this problem. Accordingly, with the aid of a public subscription she founded a separate All-India League for maternity and child-welfare, called after her name, and registered it as a separate organization under Act XXI of 1860. The objects of the Association, as described in the Memorandum of Association, are "the promotion of maternity and child welfare generally in India." It is also laid down that the funds of the League may be applied to the following, among other purposes:—

(1) The training of Health Visitors and Maternity Supervisors and the rendering of financial assistance in the employment of trained personel where necessary.

(2) Propaganda in connection with the objects of the League.

(3) The formation and establishment of Branches of the League and the affiliation with the League of other bodies having similar objects, without unduly interfering with the organization and administration of affiliated institutions or with their powers of raising money.

(4) The doing of all such things as are incidental or conducive to the attainment of the above kindred objects.

Branches of the League have been formed in Rajputana, Madras, the United Provinces, and the Punjab.

The original corpus of the League fund amounted to Rs. 8,18,657. To prevent overlapping with other activities, financial aid is not given to branches of the League in Governor's provinces, except for the purposes of Health Schools. In areas, other than Governor's provinces, financial help is given to child welfare activities generally. The bulk of the income of the League is thus devoted to Health Schools and propaganda, which latter includes National Baby Week.

The Lady Reading Health School which was formerly known as the Delhi Health School is the chief activity of the Lady Chelmsford League by whom it is entirely financed.

The Health School was started in 1919, and has trained over 100 students, who are now engaged in health work in all parts of India.

Amalgamation of Administration.—At a general meeting held in Simla in July 1923 it was decided that the administration of the Funds for the physical welfare of Indian women under the Presidency of the Viceroy's wife should be administered by a single committee and with identical rules. These funds are the Countess of Dufferin's Fund, Women's Medical Service for India, Victoria Memorial Scholarship Fund and Lady Chelmsford All-India Maternity League. The President of the Amalgamated Committee is H. E. the Lady Irwin and the Hon. and Joint Secretaries are respectively, the Surgeon to the Viceroy and Dr. A. C. Scott W.M.S. The Hon. Treasurer is Sir Frederic Gauntlett.

Lady Hardinge Medical College and Hospital.—The Lady Hardinge Medical College was opened by Lord Hardinge on the 17th February 1916. It is a residential Medical College staffed entirely by women, and was founded to commemorate the visit to Delhi, in 1911, of the Queen Empress. Lady Hardinge took the initiative in raising funds by public subscription to meet the cost of buildings and equipment. Thirty lakhs of rupees, in all, have been given for these purposes, mostly by the Ruling Princes and Chiefs of India. After Lady Hardinge's death in 1914, it was suggested by Her Imperial Majesty Queen Mary that the institution should serve as a memorial to its founder, and be called by her name.

The Governing Body includes the Director-General, Indian Medical Service, the Chief Commissioner of Delhi, the Chief Engineer, Delhi Province, the Educational Commissioner with the Government of India, the Chief Medical Officer, Women's Medical Service, a representative elected by the All-India Association of Medical Women, the Surgeon to H.E. the Viceroy, an Indian member of the Council of State 2 Indian members of the Legislative Assembly, a private Indian citizen of Delhi, a private lady resident of Delhi, the Civil Surgeon of New Delhi and the Agent, Imperial Bank of India, Delhi. The Honorary Secretary, who is also a member of the Governing Body, is the Deputy Director General, Indian Medical Service. The Deputy Accountant-General, Central Revenues, acts as Honorary Treasurer.

The College and Hospital, together with separate hostels for 100 Medical students and 70 nurses and residences for the medical and teaching staff, occupy a site of 55 acres in New Delhi (Raisina) within easy reach of the old city. The grounds are enclosed and adequate provision is made for the seclusion of both students and patients from outside observation. Strict observance of purdah cannot, however, be guaranteed in the case of students. As the hospital patients are all women or children, it is for example, necessary that students should, in their final year, attend a brief course of instruction on men patients at the Civil Hospital, Delhi. The College buildings contain a Library, Museum, Lecture Rooms, Laboratories and offices. Hostels are provided for Hindu, Moslem, Sikh and Christian students. The hospital is a fine modern building with accommodation for 200 in-patients and a commodious out-patients' department. The College and Hospital are supported by a grant of Rs. 3,11,000 from the Government of India, supplemented by grants from Provincial Governments and Indian States. Students are prepared for the Intermediate Science Examination, and the M.B., B.S. degree of the Punjab University, with which the College is affiliated.

SENIOR STAFF.

Principal and Professor of Midwifery and Gynæcology—Miss G. J. Campbell, M.D., Ch. B. (Glas.), Women's Medical Service.

Vice-Principal and Professor of Surgery—Miss E. Pfeil, M.B., B.S. (Lond.), W.M.S.

Professor of Medicine—Miss N. E. Trouton, M.B., B.S. (Lond.), M.R.C.S., L.R.C.P.. D.T.M. Calcutta.

Professor of Ophthalmology—Miss R. Roulston, M.B., Ch. B. (Glas.), D.O. (Oxon.), W.M.S.

Professor of Pathology—Miss L. S. Chatterji, M.B., Ch. B. (Aberdeen), D.P.H., Cambridge, W.M.S.

Professor of Anatomy—Miss K. J. McDermott, M.B., B.S. (Punjab), W.M.S.

Professor of Physiology—Miss A. M, Pichamuthu, M.B.,B.S. (Madras), M.R.C.S. L.R.C.P., (London).

Professor of Radiology—Miss E. Pilley M.B. (London), W.M.S.

Lecturer in Physics and Mathematics, and Superintendent of the Science Department—Miss J. H. Ross, M.A., B.Sc. (Glas.)

Lecturer in Chemistry—Miss Sosheila Ram, M.A. (Cantab.)

Lecturer in Biology—Miss C. C. Burt, B.Sc. (Edin.)

Lecturer in English—Mrs. Coatman, M.A., Manchester.

Bursar and Warden—Miss M. W. Jesson, M.A. (Cantab.)

Attached to the Hospital there are: (1) a Training School for Nurses, and (2) a Training School for Dispensers. All particulars as to admission and training may be obtained in the case of (1) from the Nursing Superintendents, Lady Hardinge Medical College Hospital, Delhi, and in the case of (2) from the Lecturer on Pharmacy, at the same address.

NURSING.

Whilst India cannot show the complete chain of efficiently-nursed hospitals which exists in England, there has been a great development of skilled nursing of recent years. This activity is principally centred in the Bengal, Madras, and Bombay Presidencies, where the chief hospitals in the Presidency towns are well nursed, and where large private staffs are maintained, available to the general public on payment of a prescribed scale of fees. These hospitals also act as training institutions, and turn out a yearly supply of fully trained nurses, both to meet their own demands and those of outside institutions

and private agencies. In this way the supply of trained nurses, English, Anglo-Indian and Indian, is being steadily increased. In Bombay the organisation has gone a step farther, through the establishment of the Bombay Presidency Nursing Association, c/o St. George's Hospital, Bombay. This is composed of representatives of the various Nursing Associations in charge of individual hospitals, and works under the Government. The principle on which the relations of this Association with the Local Associations is governed is that there shall be central examination and control combined with complete individual autonomy in administration.

State Registration of Nurses for all India is much required. A meeting was held in Bombay in 1923 when Nurses from the Presidency met to discuss the question. It is desired that India should have its own State Register as in the United Kingdom, South Africa, New Zealand, Australia, Canada and Burma, and that the curricula and examinations should be brought into line with these countries. Government has proposed to establish a Provincial Register preparatory to an All-India Register.

Nursing Bodies.—The Secretary of the Calcutta Hospital Nurses' Institution is Mr. A. R. Nicholson, Allahabad Bank Buildings, Calcutta. The names and addresses of the other Nursing bodies in Calcutta are Lady Minto's Indian Nursing Association (Bengal Branch), 4, Hungerford Street, Lady Rogers' Hostel for Indian Nurses, 144, Russa Road. South; Nurses' Academy, 6, Suburban Hospital Road; and Nurses' Bureau, 37, McLeod Street. In **Madras** there is the General Hospital, with a staff of 62 nurses, the Government Maternity Hospital, the Caste and Gosha Hospital at Kilpauk, the Royapetta Hospital and the Ophthalmic Hospital, also the Lady Ampthill Nurses' Institute and the South Indian Nursing Association (now amalgamated) President, Her Excellency Lady Goschen. The Association has under its management—*The Lady Ampthill Nurses' Institute*, Western Castle, Mount Road, Madras. Fully trained and experienced nurses for all cases of illness both among Europeans and Indians, always available. *The Lady Willingaon Nursing Home*, Western Castle, Mount Road, Madras, and *Nilgiri Nursing and Convalescent Home*, Ootacamund, for Medical, Surgical and Maternity cases. The Nilgiri Nursing Home affords admirable facilities for convalescents.

Bombay Presidency.—The Bombay Presidency was amongst the first in India to realise the value of nursing in connection with hospital work. The first steps were taken on the initiative of Mr. L. R. W. Forrest at St. George's Hospital, Bombay, where a regular nursing cadre for the hospital was established together with a small staff of nurses for private cases. This was followed by a similar movement at the J. J. and Allied Hospitals and afterwards spread to other hospitals in the Presidency. Ultimately, the Government laid down a definite principle with regard to the financial aid which they would give to such institutions, agreeing to contribute a sum equal to that raised from private sources. Afterwards, as the work grew, it was decided by Government that each nursing association attached to a hospital should have a definite constitution and consequently these bodies have all been registered as Associations under Act 21 of 1860. By degrees substantial endowments have been built up, although the Associations are still largely dependent upon annual subscriptions towards the maintenance of their work. The Associations are as follows :—

St. George's Hospital Nursing Association. Hon. Secretary: F. B. Thornely, Esq., Bombay.

Jamsetji Jijibhoy Hospital Nursing Association, Bombay. Hon. Secretary: Dr. M. V. Mehta, F.R.C.P.

Goculdas Tejpal Hospital Nursing Association. Secretary: G. A. Thomas, Esq., I.C.S., Old Custom House, Bombay.

Cama Hospital Nursing Association, Bombay. Hon. Secretary: H. C. B. Mitchell, Esq.

Sassoon Hospital Nursing Association. Poona. Hon. Secretary: A. C. Wild, Esq., I.C.S.

Karachi Civil Hospital Nursing Association, Karachi. Hon. Secretary: H. H. Hood, Esq.

Nasik Civil Hospital Nursing Association, Hon. Secretary: Civil Surgeon, Nasik.

Ahmedabad and Lely Memorial Nursing Association, Ahmedabad. Hon. Secretary: Civil Surgeon, Ahmedabad.

Bijapur Civil Hospital Nursing Association. Hon. Secretary: Civil Surgeon, Bijapur.

Dharwar Civil Hospital Nursing Association. Hon. Secretary: Civil Surgeon, Dharwar.

Prince of Wales Nursing Association, Aden. Hon. Secretary: E. Somerville Murray, Esq., Aden.

Kanara Nursing Association, Karwar. Hon. Secretary: D. S. Dhave, Esq., Karwar.

Victory Nursing Association, Sholapur. Hon. Secretary: Civil Surgeon, Sholapur.

Byramjee Jeejibhoy Hospital Nursing Association, Matheran. Hon. Secretary: Lt.-Col. B. B. Paymaster, I.M.S.

Ahmednagar Civil Hospital Nursing Association, Ahmednagar. Hon. Secretary: Civil Surgeon.

Panch Mahals Nursing Association, Godhra. Honorary Secretary: Civil Surgeon.

After further experience it was felt that it is undesirable to have a considerable number of detached and independent nursing associations, training and certifying nurses, without any common standard of entrance examination, or certification. It was therefore decided to establish the Bombay Presidency Nursing Association which came into existence in the year 1910.

The principle on which the Bombay Presidency Nursing Association works is a central system of examination, certification, registration and control. It is now the only nursing, examining, registering and certifying body in the Bombay Presidency. At the same time, the local associations retain entire charge of their local funds excepting Provident funds which have been transferred to the Central fund, and also entire control of the nurses when they are in their

employment. Proposals are now before Government for absorbing the personnel of the local associations into a Presidency Nursing Association. This will not however affect the individuality of local associations which will continue to control their own funds and to exercise control over local establishments, subject in the latter case to such limitations as a revision of the nature in question will require.

The Association commenced its operations on the 1st April 1911. The institutions recognized under the by-laws for the training of nurses at present are—St. George's Hospital, J.J. Hospital, Cama and Albless Hospitals, Bai Motlabai Hospital, Bombay; Huttesing and Premabai Civil Hospital, Ahmedabad; Civil Hospital, Belgaum; Morarbhai Vrijbhukhandas Hospital, Surat; Karachi Civil Hospital, Karachi; Sassoon Hospital, Poona; State General Hospital, Baroda; King Edward Memorial Hospital, Sholapur; V. J. Hospital, Ahmedabad; Civil Hospital, Nasik; Dufferin Hospital, Karachi; King Edward Memorial Hospital, Parel, Bombay; Zenana Mission Hospital, Broach; Bai Yamunabai L. Nair Hospital, Lamington Road, Bombay; Bomanji Dinshaw Petit Parsi General Hospital, Cumbala Hill, Bombay; West Hospital, Rajkot; Civil Hospital, Jalgaon; and the following for the training of Midwives; M. V. Hospital, Civil Hospital, Surat; Victoria Jubilee and King Edward VII Hospital, Ahmedabad; Bai Motleebai Hospital, (J. J. Hospital) Cama and Albless Hospitals, Bombay; Dufferin Hospital, Karachi; Sassoon Hospital, St. Margaret's Hospital, King Edward Memorial Hospital, Poona; Civil Hospital, Belgaum; Dufferin Hospital, Sholapur; Wadia Maternity Hospitals, Parel, Bombay; Civil Hospital, Ahmedabad; Civil Hospital, Nasik; King Edward Memorial Hospital, Sholapur: Achartlal Girdharlal Maternity Home. Ahmedabad; Zenana Mission Hospital, Broach,

Provision for retiring allowances is made for all members on the basis of a Provident Fund, and a Nursing Reserve has been established for employment in emergencies such as war, pestilence or public danger or calamity.

Address:—The Secretary, Bombay Presidency Nursing Association, Secretariat, Bombay.

Lady Minto's Indian Nursing Association.—In 1906 this Association was inaugurated, replacing the Punjab and Up-country Nursing Association for Europeans in India, which Society, established in 1892, had accomplished much useful work in this country. Owing, however, to lack of funds it was found impossible to continue its administration and to carry out the expansion of the work so urgently called for. The name of the helpers identified with the premier Association to whom the public must ever be indebted are the Hon. Lady Lyttleton, Lady Helen Munro Ferguson and Mrs. Cottrell, while Mrs. Shepherd, by her indefatigable efforts, is truly entitled to be regarded as the pioneer of a trained nursing system throughout the greater part of India. The late Lady Curzon worked energetically to provide an enlarged Nursing organisation, but mainly owing to financial reasons, she was unable before she left India to bring the scheme to fruition. The Home Committee of the existing Association, recognising the need for expansion, consented to take over the present Association and approached Lady Minto before she left England in 1905 for co-operation towards this project, and after much consideration and discussion with the Government of India, Lieut.-Governors and Commissioners of Provinces, the present Association was established. An appeal by Lady Minto, addressed to the public both in England and India, was responded to most generously, and sufficient funds were collected to form an endowment fund, which has in spite of fluctuations increased a little with time. The assistance of a Government grant is much valued, as it enables Homes for the Sisters to be kept up in six Provinces in India and in Burma. At the request of the Home Committee the enlarged Association was renamed the "Lady Minto's Indian Nursing Association."

The duties of the Home Committee are, as before, largely concerned in dispatching—as required—suitably trained and carefully selected Nurses for service on the staff of the Association in India. Thus, Europeans who are members of this Association are enabled to obtain skilled nursing at moderate charges on a sliding scale of fees determined by the income of each patient. The boon of obtaining good nursing at moderate terms is much appreciated, the rates of subscriptions being really an insurance against illness.

Her Majesty the Queen is a Patron of the Association. Her Excellency The Lady Irwin is President of the Central Committee in India.

Hon. Secretary: Lt.-Colonel Hay Thorburn, I.M.S.

Hon Treasurer: W. J. Litster, Esq., O.B.E., C.I.E.

Chief Lady Superintendent: Miss G. Beckett. Address—Central Committee, L.M.I. N.A., Viceregal Lodge, Simla, or Delhi.

Hon. Secretary, Home Committee: Lt.-Col. Sir Warren R. Crooke-Lawless, C.B., C.I.E., O.B.E., LL.D., House Governor, Osborne, Isle of Wight.

Secretary, Home Committee: Miss M. E. Ray, R.R.C., 54, Ashburnham Mansions, Chelsea.

Nurses' Organizations.—The Association of Nursing Superintendents of India is now amalgamated with the Trained Nurses' Association of India, and has the one set of officers. The Trained Nurses' Association of India and the Association of Nursing Superintendents of India are not Associations to employ or to supply nurses, but are organizations with a membership wholly of nurses with the avowed objects of improving and unifying nursing education, promoting *esprit de corps* among nurses, and upholding the dignity and honour of the nursing profession. The Associations have a membership of 472, including nurses trained in ten or more different countries, Europeans, Americans, New Zealanders, Australians and Indians. The Association of Superintendents was started in 1905 as the Association of Nursing Superintendents of the United Provinces and the Punjab, but by the next year its membership had spread

over the country to such an extent that the name was changed to include the whole of India. The Trained Nurses' Association was started in 1908, and a monthly Journal of Nursing began to be published by the two Associations in February, 1910. The Associations are affiliated with the international Council of Nurses.

President: Mrs. G. D. Franklin, 33, Rajpur Road, Delhi.

Hon. Secretary and Treasurer: Miss Gadsden, General Hospital, Madras.

THE WOMAN SUFFRAGE MOVEMENT.

Within the abnormally short period of nine years the Woman Suffrage movement has risen in India, swept through the country sympathetically and achieved the political enfranchisement of women in six of its most progressive Provinces and in four Indian States.

Three fundamental causes have led to this remarkable success: first, the deep veneration that is given by the Hindu and Muhammadan religions to the feminine aspect of life equally with the masculine as shown by the importance of goddesses, by the necessity for the presence of the wife at all ceremonies performed by a Brahman, by the idea of the sacred mystery of womanhood implied by the purdah, and by the general veneration of motherhood. Secondly, the time was psychological, for a new era was beginning for the Indian people by the introduction of a Scheme of Reforms in Indian government which was planned to give a basis of representative government on a much extended scale. The door was being opened to complete Self-government but only men were being invited to enter through it, although women compose half the people of the country and it had been by the joint efforts of men and women that the agitation for reform in the government had been made. The men and women of India were too awakened and too just to allow this injustice to remain unredressed. Thirdly, the long and strenuous agitation for the vote by women in Britain and America and their recent victories had brought vividly to the consciousness of all educated Indian men and women the whole question of the inclusion of women in public life, and it was also a national and international necessity that Indian women should be given as high a status as women in other parts of the Empire.

Though the **Municipal franchise** had been granted to the women of the Bombay and Madras Presidencies over fifteen years ago it was so limited in numbers that it did not make a large impact on women's consciousness and indeed no protest was made when it was suddenly withdrawn from Madras women some years later. Over 1,700 women are qualified to vote for the Bombay Corporation and a fair percentage of these have polled at each election, and similarly in other Municipalities in that Presidency women have exercised their vote responsibly and intelligently. Since 1922 twenty-two women have become Municipal Councillors and members of Local Government Boards, four of whom were *elected* by Bombay City voters, the others having been nominated.

It was owing to the rise of the political agitation for Home Rule between 1914 and 1917 that women began to wake up to their position of exclusion by British law from any share in representative government. The internment of one of their own sex, Dr. Besant, stimulated political activity and political self-consciousness amongst women to a very great extent. The moment for the ripe public expression of their feelings came when the Secretary of State for India came to India to investigate and study Indian affairs at first hand in 1917.

During the Hon. E. S. Montagu's visit only one Women's Deputation waited on him but it was representative of womanhood in all parts of India, and it brought to his notice the various reforms which women were specially desirous of recommending the Government to carry out.

The first claim for women suffrage for Indian women was made in the address presented to Mr. Montagu at this historic **All-India Women's Deputation** which waited upon him in Madras on the 18th December 1917. The section referring to enfranchisement merits full quotation:

"Our interests, as one half of the people, are directly affected by the demand in the united (Hindu-Muslim Reform) scheme (I. 3) that 'the Members of the Council should be elected directly by the people on as broad a franchise as possible,' and in the Memorandum (3) that 'the franchise should be broadened and extended directly to the people.' We pray that, when such a franchise is being drawn up, women may be recognized as 'people,' and that it may be worded in such terms as will not disqualify our sex, but allow our women the same opportunities of representation as our men. In agreeing with the demand of the abovementioned Memorandum that 'a full measure of Local Self-Government should be immediately granted,' we request that it shall include the representation of our women, a policy that has been admittedly successful for the past twenty years in Local Self-Government elsewhere in the British Empire. The precedent for including women in modern Indian political life has been a marked feature of the Indian National Congress, in which since its inception women have voted and been delegates and speakers, and which this year finds its climax in the election of a woman as its President. Thus the voice of India approves of its women being considered responsible and acknowledged citizens; and we urgently claim that, in the drawing up of all provisions regarding representation, our sex shall not be made a disqualification for the exercise of the franchise or for service in public life."

The year 1919 was devoted to converting the Government forces to the justice and expediency of Indian Woman Suffrage, but this proved a more difficult matter. It was a disappointment first that though the Secretary of State had given a sympathetic reply to the All-India Women's Deputation, yet when the

Scheme of Reforms, drawn up by him and Lord Chelmsford as the outcome of his visit to India, was published no mention of women was made, though the widening of the electorate was one of the reforms suggested. When the Southborough Franchise Committee was formed to investigate the suggestions regarding the franchise in this Scheme, the women suffragists took every means to bring to the notice of the Committee all the evidence which showed the need for, and the country's support of the inclusion of women in the new franchise.

After the introduction of the **Government of India Bill** into Parliament in July 1919, a number of Indian deputations proceeded to London to give evidence before the Joint Select Committee of Members of both Houses of Parliament which had been appointed to place the Reforms on a workable basis. Mrs. Annie Besant, Mrs. Sarojini Naidu and Mrs. and Miss Herabai Tata were the women who were heard by the Committee in support of the extension of the franchise to women in India.

The House of Commons decided that the question was one for Indians to answer for themselves and while retaining the sex disqualification in the Reform Bill they framed the Electoral Rules in such terms that if any Provincial Legislative Council should decide by a resolution in favour of women's franchise, women should be put on the electoral register of that Province. This was the only provision regarding franchise matters which might be changed before a 10 years' time limit. Until after that period women were ineligible for election as Legislative Councillors.

Travancore, a very progressive Indian State, was the first to grant the Legislative vote to women at the close of 1920, and it was promptly followed by the Indian State of Jhalawar. In the first session of the Legislative Councils in 1921 it is gratifying to record that a motion was tabled by Dewan Bahadur Krishnan Nair of Malabar that he would bring forward a Resolution in the **Madras** Legislative Council to remove the disqualification of sex existing in regard to the Legislative Council franchise. During the month that must legally intervene between the tabling of a Woman Suffrage motion and its introduction for Debate the Madras women under the leadership of the Women's Indian Association carried on all forms of public propaganda and canvassed the important members of the Council. The Debate took place on April 1st and after a short discussion, in which it was evident that opposition came only from the Muhammadan members, the debate itself became only an accumulation of appreciation of womanhood and an expression of faith in its future. When the division was taken, it resulted in the resolution being carried by a majority of 34. Madras has thus the honour of being the first Province in British India to enfranchise its women, and it has done ungrudgingly and unhesitatingly in the broad spirit of the equality of the sexes, as it grants the vote to women on the same terms as it has been granted to men.

Mr. Trivedi brought forward a Woman Suffrage Resolution in the **Bombay** Legislative Council during the same session, but some irregularity in its wording caused it to be pronounced out of order. In June that subject was tabled again and championed by Rao Saheb Harilal Desaibhai Desai of Ahmedabad, Deputy President of the Council. As in Madras, the intervening month was filled with suffrage activity by the women of the Presidency and was remarkable for a large joint meeting of Bombay city women at which 19 Women's Societies took part, and for a suffrage meeting of Marathi and Gujerati women in Poona when over 800 women showed the greatest enthusiasm for the movement.

The **Bombay** Council Debate on Woman Suffrage took three days and the subject was very fully discussed by over 40 members. The result was satisfactory to the suffragists, the voting being 52 in favour, 25 against and 12 neutral. Thus Madras and Bombay Presidencies gave the lead to the other Provinces. In September, 1922, Mr. S. M. Bose, in the **Bengal** Council, moved a Woman Suffrage Resolution, which was debated for three days but finally defeated by 56 to 37 votes, a *bloc* of 40 Muhammadan members voting solidly against it. In September 1925 the Bengal Council passed the Suffrage Resolution by a vote of 54 to 38.

Mr. Devaki Prasad Sinha's similar Resolution in the **Behar and Orissa** Legislative Council was defeated by only a 10 votes' majority.

These Debates proved so educational to their respective Provinces that the Bengal and Behar Provinces have since granted qualified women the Municipal vote.

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There is little doubt that it will be only a few years at most before all the provinces of India will have granted woman suffrage, and the right to vote will advance the interests of women immensely along the lines of education, health, housing, morality and social customs.

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In British India by the terms of the Reform Bill the Councils had no power to alter the disqualification of sex which remains against the right to stand as candidates for election to the Councils. This could only be changed by the vote of the British Parliament; and the gainine of this right remained as a further objective of the women suffragists. Many large, influential meetings were held claiming the right of women to entry of the Legislatures. A deputation of women about this subject waited on the Madras Governor and their claims were supported by him and by his Government. The Imperial Legislative Assembly and the Council of State had been accorded the power to grant women the franchise for their assemblies also by resolution, but only for those provinces which had already granted women the Legislative franchise. The Legislative Assembly has passed by a large majority a Resolution granting the Assembly franchise to the women of such Provinces. Accordingly in November 1923, women in India voted for the first time for the elections of both Provincial Legislative Councillors and members of the Legislative Assembly. The number of women who voted in the large cities was surprisingly large in Bombay and Madras Presidencies and comprised women of all castes and communities.

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The number of women enfranchised by the grant of the vote throughout India will not be more than a million under the present qualifications. Property and not literacy is the basis of the franchise, though the grant of the vote to every graduate of seven years' standing ensures that the best educated women of the country as well as those who have to shoulder the largest property responsibilities will be those who rightly will be the legislating influence on behalf of womanhood. As regards the custom of purdah prevailing in parts of India special provisions have been made in Municipal voting for purdah recording stations for purdah women in which a woman is returning officer and this has been found quite satisfactory and will be adopted also where desired in connection with Legislative Council elections.

Though the Women's Indian Association is the only defined Suffrage Society almost all other women's organisations have combined in special efforts for the gaining of municipal and legislative rights and the following ladies have identified themselves specially with the movement: Lady D. Tata, Lady A. Bose, Lady T. Sadasivaier, the Begum of Cambay, Mrs. Sarojini Naidu, Mrs. Jaiji Jehangir Petit, Mrs. Tata, Mrs. Wadia, Mrs. Jinarajadasa, Mrs. A. Besant, Mrs. M. E. Cousins, Mrs. Srirangamma Mrs. Chandrasekhara Iyer, Miss S. Sorabji, Mrs. Khedkar, Dr. Mistry, Dr. Muthulakshmi Ammal, Mrs. Palmer, Mrs. Saraladevi Choudhuri, Mrs. Kumudini Basu, Mrs. K. N. Roy Lady Shafi, Mrs. Hassan Imam, Miss S. B. Das, Mrs. Rustomji Faridoonji, Mrs. B. Rama Rao, Mrs. Deep Narain Singh, Mrs. Raschid, Mrs. van Gildemeester, etc.

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Warrant of Precedence.

A new Warrant of Precedence for India in supersession of the notification published on February 10, 1899, which has been approved by His Majesty the King Emperor of India, was published in 1922. Henceforth the following table will be observed with respect to the rank and precedence of persons named, as under :—

1. Governor-General and Viceroy of India.
2. Governors of Provinces within their respective charges.
3. Governors of Madras, Bombay and Bengal.
4. Commander-in-Chief in India.
5. Governors of the United Provinces, Punjab, Behar and Burma.
6. Governors of the Central Provinces and Assam.
7. Chief Justice of Bengal.
8. Bishop of Calcutta, Metropolitan of India.
9. Members of the Governor-General's Executive Council.
10. Commander-in-Chief of His Majesty's Naval Forces in the East Indies.
11. President of the Council of State.
12. President of the Legislative Assembly.
13. Chief Justice of a High Court other than that of Bengal.
14. Bishops of Madras and Bombay.
15. Agents to the Governor-General in Rajputana, Central India and Baluchistan, Chief Commissioner of the North-West Frontier Province, Members of Executive Councils and Ministers of Governors and Lieutenant-Governors, Political Resident in the Persian Gulf, Residents at Hyderabad and in Mysore, and Commissioner in Sind,—within their respective charges.
16. Chief of the General Staff; Chief Commissioner of Railways; General Officer Commanding Northern, Southern, Eastern and Western Commands, and Officers of the rank of General.
17. Members of the Executive Councils and Ministers in Madras, Bombay and Bengal.
18. Members of the Executive Councils and Ministers, United Provinces, Punjab, Burma and Behar.
19. Agents to the Governor-General in Rajputana, Central India and Baluchistan; Chief Commissioner of the North-West Frontier Province; Political Resident in the Persian Gulf; and Residents at Hyderabad and in Mysore.
20. Members of the Executive Councils and Ministers, Central Provinces and Assam.
21. Presidents of Legislative Councils within their respective Provinces.
22. Chief Judges of Chief Courts; and Puisne Judges of High Courts.
23. Lieutenant-Generals.
24. Comptroller and Auditor-General; President of the Public Service Commission and President of the Railway Board.
25. Bishops of Lahore, Rangoon, Lucknow and Nagpur.
26. Members of the Railway Board, Railway Financial Commissioner; and Secretaries to the Government of India.
27. Additional Secretaries and Joint Secretaries to the Government of India; Commissioner in Sind; Financial Adviser, Military Finance; Judges of Chief Courts; and Members of the Central Board of Revenue.
28. Chief Commissioner of the Andamans and Chief Commissioner of Delhi,—within their respective charges; Chief Secretaries to the Governments of Madras, Bombay and Bengal. Agent to the Governor-General, Punjab States when within the Punjab.
29. Commissioner of Revenue and Customs, Bombay; Consulting Engineer to the Government of India; Development Commissioner, Burma; Director of Development, Bombay; Director-General, Indian Medical Service; Director-General of Posts and Telegraphs; Financial Commissioners; Judicial Commissioners of Oudh, Central Provinces, Sind and Upper Burma; Major-Generals; members of a Board of Revenue; Surgeon-Generals.
30. Vice-Chancellors of the Indian Universities.
31. Agents of State Railways; Controller of the Currency; Additional Judicial Commissioners; Agency Commissioner, Madras; Commissioners of Divisions, and Residents of the 2nd Class,—within their respective charges.
32. Members of the Indian Civil Service of 30 years' standing (not holding any other appointment mentioned in this Warrant).
33. Advocate-General, Calcutta.
34. Advocates-General, Madras and Bombay.
35. Chief Secretaries to Governments other than those of Madras, Bombay, Bengal and Assam.
36. Bishops (not territorial) under license from the Crown.
37. Accountants-General, Class I; Agricultural Adviser to the Government of India; Archdeacons of Calcutta, Madras and Bombay; Census Commissioner for India; Chief Controller of Stores, Indian Stores Department, Colonels Commandant and Colonels on the Staff; Commissioner, Northern India Salt Revenue; Director, Intelligence Bureau; Director-General of Archæology in India; Director of the Geological Survey; Director, Royal Indian Marine, when an officer of the Royal Navy of rank lower than Rear-Admiral or an officer of the Royal Indian Marine; Educational Commissioner with the Government of India; His Majesty's Senior Trade Commissioner, Calcutta; Inspector General of Forests; Military Accountant-General; Opium Agent, Benares; Sanitary Commissioner with the Government of India; and Surveyor General of India.
38. Additional Judicial Commissioners; Agency Commissioner, Madras; Chief Commissioner of the Andamans; Chief Commissioner of Delhi, Chief Secretary to the Government of Assam; Commissioners of Divisions; and Residents of the 2nd Class.
39. Private Secretary to the Viceroy; Secretaries; Additional Secretaries and Joint Secretaries to Local Governments.
40. Accountants-General other than Class I; Chief Auditors, Eastern Bengal Railway and North-Western Railway; Chief Conservators of Forests; Chief Engineers; Chief Engineer, Telegraphs; Colonels; Command Controllers of Military Accounts; Deputy Controller of the Currency at Bombay; Director of the Botanical Survey of India; Directors, Civil Engineering, Mechanical Engineering, Traffic and Establishment and Railway Board; Director-General of

Commercial Intelligence; Director-General of Observatories; Directors of Public Instruction under Local Governments; Director, Zoological Survey; Financial Adviser, Posts and Telegraphs; His Majesty's Trade Commissioners, Bombay and Calcutta; Inspectors-General, Civil Hospitals; Inspectors-General of Police under Local Governments and in the North-West Frontier Province; Inspectors-General of Prisons under Local Governments; Members of the Indian Civil Service and of the Indian Political Department of 23 years' Civil service, if not holding any other appointment mentioned in this Warrant; Mint Masters, Calcutta and Bombay; President of the Forest College and Research Institute; Provincial Sanitary Commissioners; Superintendents of the Imperial Survey of India; and Traffic Managers and Locomotive Superintendents of State Railways.

41. Military Secretary to the Viceroy.

42. Solicitor to the Government of India; and Standing Counsel to the Government of India.

43. Archdeacons of Lahore, Lucknow, Rangoon and Nagpur; and Presidency Senior Chaplains of the Church of Scotland.

44. Chairmen of Port Trusts and of Improvement Trusts of the Presidency towns, Rangoon and Karachi; Members of the Public Service Commission; Non-official Presidents of Municipal Corporations in Presidency towns and Rangoon within their respective municipal jurisdictions; Settlement Commissioners; Chief Executive Officers of the Municipalities of the Presidency towns and Rangoon within their charges; and Chief Inspector of Mines.

45. Collectors of Customs; Collectors and Magistrates of Districts; Collector of Stamp Revenue and Deputy Collector of Land Revenue, Calcutta; Commissioner of Ajmer-Merwara; Deputy Commissioners of Districts, and Deputy Commissioner, Port Blair; Divisional and District and Sessions Judges (including the Judicial Commissioner of Chota Nagpur); Political Agents and Superintendents, and Residents (other than those of the 1st and 2nd Class),—within their respective charges; Commissioners of Income Tax; Remembrancers of Legal Affairs and Government Advocates under Local Governments.

46. Deputy Financial Adviser, Military Finance; Deputy Secretaries to the Government of India; Director, Central Bureau of Information, Government of India; Director of Inspection, Indian Stores Department; Director of Purchases and Intelligence, Indian Stores Department; Establishment Officer in the Army Department and to the Railway Board.

47. Director, Central Research Institute, Kasauli; Director of the Indian Institute of Science; and Principal of the Thomason Civil Engineering College, Roorki.

48. Assistant to the Inspector-General of Forests; Commandant, Frontier Constabulary, North-West Frontier Province; Commissioners of Police in the Presidency towns and Rangoon; Comptroller, Assam; Conservators of Forests; Controller of Army Factory Accounts; Controller of Marine Accounts Controller, Royal Air Force Accounts; Deputy Chief Engineer, Telegraphs; Deputy Director General Indian Medical Service; Deputy Director-General of Post Office; Deputy Director-General, Telegraph Traffic; Deputy Director, Intelligence Bureau Deputy Military Accountant-General; Director, Medical Research; Director of Wireless, Directors of Telegraph Engineering; District Controllers of Military Accounts; Lieutenant-Colonels; Members of the Indian Civil Service and of the Political Department of 18 years' Civil Service, if not holding any other appointment mentioned in this Warrant; Mining Engineer to the Railway Board; Postmasters-General; and Superintending Engineers.

49. Assay Master, Bombay; Chief Auditor, Oudh and Rohilkhand Railway; Deputy Controllers of the Currency, Calcutta and Northern India; and Deputy Controller General.

50. Actuary to the Government of India; Chief Inspector of Explosives; Chief Judges of Small Cause Courts, Presidency towns and Rangoon; Controller of Printing, Stationery and Stamps; Director, Imperial Bacteriological Laboratory, Muktesar; Directors of major Laboratories; Director of Public Instruction, North-West Frontier Province.

51. Private Secretaries to Governors, and Secretaries and First Assistants in 1st Class Residencies.

52. Administrators-General; Chief Presidency Magistrates; Deputy Agents, Deputy Traffic Managers and Officers of similar status of State Railways; Deputy Directors, Railway Board; Metallurgical Inspector, Jamshedpur; and Officers in Class I of the General of the Public Works List of the Indian Finance Department.

53. Commissioner of Labour, Madras; Controller of Patents; Deputy Inspectors-General of Police; Directors of Agriculture; Directors of Fisheries in Bengal and Madras; Directors of Industries; Directors of Land Records; Excise Commissioners; Inspector-General of Railway Police and Police Assistant to the Agent to the Governor-General, Rajputana; Inspectors-General of Registration; Principal, Research Institute, Cawnpore, and Registrars of Co-operative Societies.

54. District Judges not being Sessions Judges within their own districts.

55. First Assistant to the Residents at Aden Baroda and in Kashmir; Judicial Assistant Kathiawar; and Chairman of Port Trust, Aden

56. Military Secretaries to Governors.

57. Senior Chaplains other than those already specified.

58. Sheriffs within their own charges.

59. Collectors of Customs; Collectors and Magistrates of Districts; Collector of Stamp Revenue and Deputy Collector of Land Revenue Calcutta; Commissioner of Ajmer-Merwara; Deputy Commissioners of Districts; Deputy Commissioner, Port Blair; Divisional and District and Sessions Judges (including the Judicial Commissioner of Chota Nagpur); Political Agents and Superintendents; Residents (other than those of the 1st and 2nd Class) and Settlement Officers.

Warrant of Precedence.

A new Warrant of Precedence for India in supersession of the notification published on February 10, 1899, which has been approved by His Majesty the King Emperor of India, was published in 1922. Henceforth the following table will be observed with respect to the rank and precedence of persons named, as under:—

1. Governor-General and Viceroy of India.
2. Governors of Provinces within their respective charges.
3. Governors of Madras, Bombay and Bengal.
4. Commander-in-Chief in India.
5. Governors of the United Provinces, Punjab, Behar and Burma.
6. Governors of the Central Provinces and Assam.
7. Chief Justice of Bengal.
8. Bishop of Calcutta, Metropolitan of India.
9. Members of the Governor-General's Executive Council.
10. Commander-in-Chief of His Majesty's Naval Forces in the East Indies.
11. President of the Council of State.
12. President of the Legislative Assembly.
13. Chief Justice of a High Court other than that of Bengal.
14. Bishops of Madras and Bombay.
15. Agents to the Governor-General in Rajputana, Central India and Baluchistan, Chief Commissioner of the North-West Frontier Province, Members of Executive Councils and Ministers of Governors and Lieutenant-Governors, Political Resident in the Persian Gulf, Residents at Hyderabad and in Mysore, and Commissioner in Sind,—within their respective charges.
16. Chief of the General Staff; Chief Commissioner of Railways; General Officer Commanding Northern, Southern, Eastern and Western Commands, and Officers of the rank of General.
17. Members of the Executive Councils and Ministers in Madras, Bombay and Bengal.
18. Members of the Executive Councils and Ministers, United Provinces, Punjab, Burma and Behar.
19. Agents to the Governor-General in Rajputana, Central India and Baluchistan; Chief Commissioner of the North-West Frontier Province; Political Resident in the Persian Gulf; and Residents at Hyderabad and in Mysore.
20. Members of the Executive Councils and Ministers, Central Provinces and Assam.
21. Presidents of Legislative Councils within their respective Provinces.
22. Chief Judges of Chief Courts; and Puisne Judges of High Courts.
23. Lieutenant-Generals.
24. Comptroller and Auditor-General; President of the Public Service Commission and President of the Railway Board.
25. Bishops of Lahore, Rangoon, Lucknow and Nagpur.
26. Members of the Railway Board, Railway Financial Commissioner; and Secretaries to the Government of India.
27. Additional Secretaries and Joint Secretaries to the Government of India; Commissioner in Sind; Financial Adviser, Military Finance; Judges of Chief Courts; and Members of the Central Board of Revenue.
28. Chief Commissioner of the Andamans and Chief Commissioner of Delhi,—within their respective charges; Chief Secretaries to the Governments of Madras, Bombay and Bengal. Agent to the Governor-General, Punjab States when within the Punjab.
29. Commissioner of Revenue and Customs, Bombay; Consulting Engineer to the Government of India; Development Commissioner, Burma; Director of Development, Bombay; Director-General, Indian Medical Service; Director-General of Posts and Telegraphs; Financial Commissioners; Judicial Commissioners of Oudh, Central Provinces, Sind and Upper Burma; Major-Generals; members of a Board of Revenue; Surgeon-Generals.
30. Vice-Chancellors of the Indian Universities.
31. Agents of State Railways; Controller of the Currency; Additional Judicial Commissioners; Agency Commissioner, Madras; Commissioners of Divisions, and Residents of the 2nd Class,—within their respective charges.
32. Members of the Indian Civil Service of 30 years' standing (not holding any other appointment mentioned in this Warrant).
33. Advocate-General, Calcutta.
34. Advocates-General, Madras and Bombay.
35. Chief Secretaries to Governments other than those of Madras, Bombay, Bengal and Assam.
36. Bishops (not territorial) under license from the Crown.
37. Accountants-General, Class I; Agricultural Adviser to the Government of India; Archdeacons of Calcutta, Madras and Bombay; Census Commissioner for India; Chief Controller of Stores, Indian Stores Department, Colonels Commandant and Colonels on the Staff; Commissioner, Northern India Salt Revenue; Director, Intelligence Bureau; Director-General of Archæology in India; Director of the Geological Survey; Director, Royal Indian Marine, when an officer of the Royal Navy of rank lower than Rear-Admiral or an officer of the Royal Indian Marine; Educational Commissioner with the Government of India; His Majesty's Senior Trade Commissioner, Calcutta; Inspector General of Forests; Military Accountant-General; Opium Agent, Benares; Sanitary Commissioner with the Government of India; and Surveyor General of India.
38. Additional Judicial Commissioners; Agency Commissioner, Madras; Chief Commissioner of the Andamans; Chief Commissioner of Delhi, Chief Secretary to the Government of Assam; Commissioners of Divisions; and Residents of the 2nd Class.
39. Private Secretary to the Viceroy; Secretaries; Additional Secretaries and Joint Secretaries to Local Governments.
40. Accountants-General other than Class I; Chief Auditors, Eastern Bengal Railway and North-Western Railway; Chief Conservators of Forests; Chief Engineers; Chief Engineer, Telegraphs; Colonels; Command Controllers of Military Accounts; Deputy Controller of the Currency at Bombay; Director of the Botanical Survey of India; Directors, Civil Engineering, Mechanical Engineering, Traffic and Establishment and Railway Board; Director-General of

Commercial Intelligence; Director-General of Observatories; Directors of Public Instruction under Local Governments; Director, Zoological Survey; Financial Adviser, Posts and Telegraphs; His Majesty's Trade Commissioners, Bombay and Calcutta; Inspectors-General, Civil Hospitals; Inspectors-General of Police under Local Governments and in the North-West Frontier Province; Inspectors-General of Prisons under Local Governments; Members of the Indian Civil Service and of the Indian Political Department of 23 years' Civil service, if not holding any other appointment mentioned in this Warrant; Mint Masters, Calcutta and Bombay; President of the Forest College and Research Institute; Provincial Sanitary Commissioners; Superintendents of the Imperial Survey of India; and Traffic Managers and Locomotive Superintendents of State Railways.

41. Military Secretary to the Viceroy.

42. Solicitor to the Government of India; and Standing Counsel to the Government of India.

43. Archdeacons of Lahore, Lucknow, Rangoon and Nagpur; and Presidency Senior Chaplains of the Church of Scotland.

44. Chairmen of Port Trusts and of Improvement Trusts of the Presidency towns, Rangoon and Karachi; Members of the Public Service Commission; Non-official Presidents of Municipal Corporations in Presidency towns and Rangoon within their respective municipal jurisdictions; Settlement Commissioners; Chief Executive Officers of the Municipalities of the Presidency towns and Rangoon within their charges; and Chief Inspector of Mines.

45. Collectors of Customs; Collectors and Magistrates of Districts; Collector of Stamp Revenue and Deputy Collector of Land Revenue, Calcutta; Commissioner of Ajmer-Merwara; Deputy Commissioners of Districts, and Deputy Commissioner, Port Blair; Divisional and District and Sessions Judges (including the Judicial Commissioner of Chota Nagpur); Political Agents and Superintendents, and Residents (other than those of the 1st and 2nd Class), —within their respective charges; Commissioners of Income Tax; Remembrancers of Legal Affairs and Government Advocates under Local Governments.

46. Deputy Financial Adviser, Military Finance; Deputy Secretaries to the Government of India; Director, Central Bureau of Information, Government of India; Director of Inspection, Indian Stores Department; Director of Purchases and Intelligence, Indian Stores Department; Establishment Officer in the Army Department and to the Railway Board.

47. Director, Central Research Institute, Kasauli; Director of the Indian Institute of Science; and Principal of the Thomason Civil Engineering College, Roorki.

48. Assistant to the Inspector-General of Forests; Commandant, Frontier Constabulary, North-West Frontier Province; Commissioners of Police in the Presidency towns and Rangoon; Comptroller, Assam; Conservators of Forests; Controller of Army Factory Accounts; Controller of Marine Accounts Controller, Royal Air Force Accounts; Deputy Chief Engineer, Telegraphs; Deputy Director General Indian Medical Service; Deputy Director-General of Post Office; Deputy Director-General, Telegraph Traffic; Deputy Director, Intelligence Bureau Deputy Military Accountant-General; Director, Medical Research; Director of Wireless, Directors of Telegraph Engineering; District Controllers of Military Accounts; Lieutenant-Colonels; Members of the Indian Civil Service and of the Political Department of 18 years' Civil Service, if not holding any other appointment mentioned in this Warrant; Mining Engineer to the Railway Board; Postmasters-General; and Superintending Engineers.

49. Assay Master, Bombay; Chief Auditor, Oudh and Rohilkhand Railway; Deputy Controllers of the Currency, Calcutta and Northern India; and Deputy Controller General.

50. Actuary to the Government of India; Chief Inspector of Explosives; Chief Judges of Small Cause Courts, Presidency towns and Rangoon; Controller of Printing, Stationery and Stamps; Director, Imperial Bacteriological Laboratory, Muktesar; Directors of major Laboratories; Director of Public Instruction, North-West Frontier Province.

51. Private Secretaries to Governors, and Secretaries and First Assistants in 1st Class Residencies.

52. Administrators-General; Chief Presidency Magistrates; Deputy Agents, Deputy Traffic Managers and Officers of similar status of State Railways; Deputy Directors, Railway Board; Metallurgical Inspector, Jamshedpur; and Officers in Class I of the General of the Public Works List of the Indian Finance Department.

53. Commissioner of Labour, Madras; Controller of Patents; Deputy Inspectors-General of Police; Directors of Agriculture; Directors of Fisheries in Bengal and Madras; Directors of Industries; Directors of Land Records; Excise Commissioners; Inspector-General of Railway Police and Police Assistant to the Agent to the Governor-General, Rajputana; Inspectors-General of Registration; Principal, Research Institute, Cawnpore, and Registrars of Co-operative Societies.

54. District Judges not being Sessions Judges within their own districts.

55. First Assistant to the Residents at Aden Baroda and in Kashmir; Judicial Assistant Kathiawar; and Chairman of Port Trust, Aden

56. Military Secretaries to Governors.

57. Senior Chaplains other than those already specified.

58. Sheriffs within their own charges.

59. Collectors of Customs; Collectors and Magistrates of Districts; Collector of Stamp Revenue and Deputy Collector of Land Revenue Calcutta; Commissioner of Ajmer-Merwara; Deputy Commissioners of Districts; Deputy Commissioner, Port Blair; Divisional and District and Sessions Judges (including the Judicial Commissioner of Chota Nagpur); Political Agents and Superintendents; Residents (other than those of the 1st and 2nd Class) and Settlement Officers.

60. Assistant Directors-General of the Post Office, 1st grade; Chief Forest Officers, Andamans and Nicobars; Deputy Directors of Commercial Intelligence; Deputy Director-General of Archæology; Deputy Director of Industries, United Provinces; Deputy Postmasters-General, 1st grade; Deputy Registrar of Co-operative Societies, United Provinces; Deputy Superintendents of the Imperial Survey of India; Government Solicitors other than the Solicitor and Assistant Solicitor to the Government of India; Managing Director, Opium Factory, Ghazipur; Officers of the Indian Educational Service and of the Indian Institute of Science of 18 years' standing; Principals of major Government Colleges; Registrars to the High Courts; Secretaries to Legislative Councils; Senior Inspectors of Mines; Assistant Collectors of Customs; Divisional Engineers and Assistant Engineers, Telegraphs; Executive Engineers of the Indian Service of Engineers holding a charge declared to be of not less importance than that of a division; Officers of the Archæological and other Scientific Departments; Officers of the Civil Veterinary Department; Officers of Class II of the General or the Public Works List of the Indian Finance Department; Officers of the Indian Agricultural Service; Officers of the Indian Forest Department; Officers on the Superior List of the Military Accounts Department; Officers of the Superior Revenue Establishment of State Railways who hold the rank of district officer or a position of a similar status and Superintendents and Deputy Commissioners of Police of 20 years' standing. Principal, School of Mines and Geology; Instructor, Wireless; Wireless Research Officers, Divisional Engineers and Assistant Divisional Engineers, Wireless; Officers of the 1st Division, Superior Traffic Branch of the Telegraph Department of 20 years' standing, Superintendent of the Government Test House.

61. Assistant Solicitor to the Government of India; Assistant Director, Public Information, Government of India, and Under-Secretaries to the Government of India.

62. Agent-General in India for the British Protectorate in Africa under the administration of the Colonial Office; Chief Constructor of the Royal Indian Marine Dockyard at Bombay; Consulting Surveyor to the Government, Bombay; Directors of the Persian Gulf Section and of the Persian Section of the Indo-European Telegraph Department; Directors of Survey, Madras and Bengal; Keeper of the Records of the Government of the India; and Librarian, Imperial Library.

63. Civilian Superintendents of Ordnance Factories; District Judges not being Sessions Judges; Majors; and Members of the Indian Civil Service of 12 years' standing.

64. * * *

65. Assistant Directors-General of the Post Office, 2nd grade; Assistant Superintendents of the Imperial Survey of India; Chief Works Chemist, United Provinces; Civil Engineer Adviser to the Director of Ordnance Factories; Deputy Postmasters-General, 2nd grade; Officers of the Indian Educational Service and of the Indian Institute of Science of 20 years' standing; Officer in charge of the Mathematical Instrument Office; Presidency Postmasters; Superintendent, Bombay City Survey and Land Records; Superintendents and Deputy Commissioners of Police of less than 20 years' standing; Assistant Collectors of Customs; Divisional Engineers and Assistant Divisional Engineers, Telegraphs; Executive Engineers of the Indian Service of Engineers holding a charge declared to be of not less importance than that of a division; Officers of the Archæological and other Scientific Departments; Officers of the Civil Veterinary Department; Officers of Class II of the General or Public Works List of the Indian Finance Department; Officers of the Indian Agricultural Service; Officers of the Indian Forest Department; Officers on the Superior List of the Military Accounts Department; and Officers of the Superior Revenue Establishment of State Railways who hold the rank of district officer or a position of similar status of 12 years' standing. Examiner of Local Fund Accounts, Madras; Assistant Commissioners of Income-Tax; Instructor, Wireless; Wireless Research Officers, Divisional Engineers and Assistant Divisional Engineers, Wireless; Officers of the 1st Division Superior Traffic Branch of the Telegraph Department, Forest Engineers of 12 years' standing; Works Managers, Indian Ordnance Factories.

66. Assistant Commissioners (Senior), Northern India Salt Revenue; Assistant Director of Dairy Farms; Assistant Directors, Railway Board; Assistant Financial Adviser, Military Finance; Assistant Secretaries to the Government of India; Chemical Examiner for Customs and Excise, Calcutta; Chief Chemical Examiner, Central Chemical Laboratory, Naini Tal; Chief Inspectors of Factories and Boilers in Bengal and Bombay; Commander of the steamer employed in the Persian Gulf Section of the Indo-European Telegraph Department; Curator of the Bureau of Education; Deputy Administrator-General, Bengal; Deputy Commissioner, Northern India Salt Revenue; Deputy Commissioners of Salt and Excise; Deputy Director of Land Records, Burma; Deputy Sanitary Commissioners; Superintendents of Central Jails and Civil Surgeons not belonging to the Indian Medical Service; Director, Vaccine Institute, Belgaum; Emigration Commissioners; Engineer and Electrician of the Persian Gulf Section of the Indo-European Telegraph Department; Examiner of Questioned Documents; Executive Engineers of less than 12 years' standing: First Assistant Commissioner, Port Blair; Honorary Presidency Magistrates; Judge of the City Civil Court, Madras; Judges of Presidency Courts of Small Causes; Lady Assistants to the Inspector-General, Civil Hospitals; Legal Assistant in the Legislative Department of the Government of India; Officers of the Provincial Civil Services drawing the maximum pay of the time-scale of upwards; Presidency Magistrates; Protector of Emigrants and Superintendents of Emigration, Calcutta; Protectors of Emigrants; Public Prosecutors in Bengal and in Sind; Registrars to Chief Courts; Registrar of Companies, Bombay; Registrar of Joint Stock Companies, Bengal; Secretary, Board of Examiners; Secretary to the Board of Revenue in the Department of Revenue and Agriculture, Madras, when a member of the Provincial Service; Senior Income-tax Officer

Bombay, and Income-tax Officers drawing the maximum pay of the time-scale; and Sub-Deputy Opium Agents.

1. The entries in the above table apply exclusively to the persons entered therein, and while regulating their relative precedence with each other, do not give them any precedence over members of the non-official community resident in India who shall take their place according to usage.

2. Officers in the above table will take precedence in order of the numbers of the entries. Those included in one number will take precedence *inter se* according to the date of entry into that number.

3. When an officer holds more than one position in the table he will be entitled to the highest position accorded to him.

4. Officers who are temporarily officiating in any number in the table will rank in that number below permanent incumbents.

5. All officers not mentioned in the above table, whose rank is regulated by comparison with rank in the army, to have the same rank with reference to civil servants as is enjoyed by military officers of equal grades.

6. All other persons who may not be mentioned in this table to take rank according to general usage, which is to be explained and determined by the Governor-General in Council in case any question shall arise. When the position of any such person is so determined and notified, it shall be entered in the table in italics, provided he holds an appointment in India.

7. Nothing in the foregoing rules to disturb the existing practice relating to precedence at the Courts of Indian States or on occasions of intercourse with Indians, and the Governor-General in Council to be empowered to make rules for such occasions in case any dispute shall arise.

8. The following will take courtesy rank as shown:—

Consuls-General, Immediately after article 37, which includes Colonels Commandant; Consuls, immediately after article 40, which includes Colonels; Vice-Consuls, Immediately after article 63, which includes Majors.

Consular officers de carriere will in their respective grades take precedence of consular officers who are not de carriere.

9. The following may be given, by courtesy, precedence as shown below, provided that they do not hold appointments in India:—

Peers according to their precedence in England; Knights of the Garter, the Thistle and St. Patrick; Privy Councillors; Members of the Council of the Secretary of State for India.—Immediately after Members of the Governor-General's Executive Council, article 9.

Baronets of England, Scotland, Ireland and the United Kingdom, according to date of Patents Knights Grand Cross of the Bath; Knights Grand Commander of the Star of India; Knights Grand Cross of St. Michael and St. George; Knights Grand Commander of the Indian Empire; Knights Grand Cross of the Royal Victorian Order; Knights Grand Cross of the Order of the British Empire. Immediately after the Commissioner in Sind (Article 15); Knights Commander of the Bath; Knights Commander of the Star of India; Knights Commander of St. Michael and St. George; Knights Commander of the Indian Empire; Knights Commander of the Royal Victorian Order; Knights Commander of the Order of the British Empire; and Knights Bachelor.—Immediately after the Residents of the Second Class, Article 31.

10. All ladies, unless by virtue of holding an appointment themselves they are entitled to a higher position in the table, to take place according for the rank herein assigned to their respective husbands, with the exception of wives of Peers and of ladies having precedence in England independently of their husbands, and who are not in rank below the daughters of Barons such ladies to take place according to their several ranks, with reference to such precedence in England, immediately after the wives of Members of the Governor-General's Executive Council.

SALUTES.

Persons.	No. of guns.	Occasions on which salute is fired.
Imperial salute	101	When the Sovereign is present in person.
Royal salute	31	On the anniversaries of the Birth, Accession and Coronation of the Reigning Sovereign; the Birthday of the Consort of the Reigning Sovereign; the Birthday of the Queen Mother; Proclamation Day.
Members of the Royal Family	31	On arrival at, or departure from a military station, or when attending a State ceremony.
Foreign Sovereigns and members of their families.	21	
Maharajadhiraja of Nepal	21	
Sultan of Maskat	21	
Sultan of Zanzibar	21	
Ambassadors	19	
Governor of the French Settlements in India.	17	
Governor of Portuguese India	17	
Governors of His Majesty's Colonies ..	17	
Lieutenant-Governors of His Majesty's Colonies.	15	
Plenipotentiaries and Envoys	15	
Governor of Damaun	9	
Governor of Diu	9	

Persons.	No. of Guns.	Occasions on which salute is fired.
Viceroy and Governor-General.. ..	31	On arrival at, or departure from, a military station within Indian territories or when attending a State ceremony.
Governors of Presidencies and Provinces in India.	17	On assuming or relinquishing office whether temporarily or permanently. On occasions of a *public* arrival at, or departure from, a military station, and on formal ceremonial occasions such as arriving at or leaving a Durbar, or when paying a formal visit to a Ruling Chief. Also on occasions of private arrival at, or departure from, a military station, if desired.
Residents, 1st Class	13	Same as Governors.
Agents to the Governor-General ..	13	
Commissioner in Sind	13	
Agent to the Governor in Kathiawar ..	13	
Residents, 2nd Class	13	On assuming or relinquishing office, and on occasion of a *public* arrival at, or departure from a military station.
Political Agents (*b*)	11	
Commander-in-Chief in India (if a Field Marshal).	19	On assuming or relinquishing office. On *public* arrival at, or departure from, a military station, and on formal ceremonial occasions. Also on occasions of private arrival or departure, if desired.
Commander-in-Chief in India (if a General)	17	
Naval Commander-in-Chief, East Indies Squadron (*c*).	..	Same as for military officer of corresponding rank (*see* K.R.).
G.Os.C. in C.-Commands (*d*)	15	On assuming or relinquishing command, and on occasions of *public* arrival at or departure from, a military station within their command. Also on occasions of private arrival or departure, if desired.
Major-Generals Commanding Districts (*d*).	13	
Major-Generals and Colonel-Commandants Commanding Brigades (*d*).	11	

Permanent Salutes to Ruling Princes and Chiefs.

Salutes of 21 *guns.*

Baroda. The Maharaja (Gaekwar) of.
Gwalior. The Maharaja (Scindia) of.
Hyderabad. The Nizam of.
Jammu and Kashmir. The Maharaja of.
Muscat. The Sultan of.
Mysore. The Maharaja of.

Salutes of 19 *guns.*

Bhopal. The Begam (or Nawab) of.
Indore. The Maharaja (Holkar) of.
Kalat. The Khan (Wali) of.
Kolhapur. The Maharaja of.
Travancore. The Maharaja of.
Udaipur (Mewar). The Maharana of.

Salutes of 17 *guns.*

Bahawalpur. The Nawab of.
Bharatpur. The Maharaja of.
Bikaner. The Maharaja of.
Bundi. The Maharao Raja of.
Cochin. The Maharaja of.
Cutch. The Maharao of.
Jaipur. The Maharaja of.
Jodhpur (Marwar). The Maharaja of.
Karauli. The Maharaja of.
Kotah. The Maharao of.
Patiala. The Maharaja of.
Rewa. The Maharaja of.
Tonk. The Nawab of.

Salutes of 15 *guns.*

Alwar. The Maharaja of.
Banswara. The Maharawal of.
Bhutan. The Maharaja of.
Datia. The Maharaja of.
Dewas (Senior Branch). The Maharaja of
Dewas (Junior Branch). The Maharaja of.
Dhar. The Maharaja of.
Dholpur. The Maharaj Rana of.
Dungarpur. The Maharawal of.
Idar. The Maharaja of.
Jaisalmer. The Maharawal of.

(*b*) Within the territories of the State to which they are attached.
(*c*) According to naval rank, with two guns added.
(*d*) No military officer shall receive an artillery salute unless he is in actual military command and is the senior military officer in the spot. Attention is invited to the extra guns allowed for individuals.

Khairpur. The Mir of.
Kishangarh. The Maharaja of.
Orchha. The Maharaja of.
Partabgarh. The Maharawat of.
Rampur. The Nawab of.
Sikkim. The Maharaja of.
Sirohi. The Maharao of.

Salutes of 13 *guns.*

Benares. The Maharaja of.
Bhavnagar. The Maharaja of.
Cooch Behar. The Maharaja of.
Dhrangadhra. The Maharaja of.
Jaora. The Nawab of.
Jhalawar. The Maharaj-Rana of.
Jind. The Maharaja of.
Junagadh. The Nawab of.
Kapurthala. The Maharaja of.
Nabha. The Maharaja of.
Nawanagar. The Maharaja of.
Palanpur. The Nawab of.
Porbandar. The Maharaja of.
Rajpipla. The Maharaja of.
Ratlam. The Maharaja of.
Tripura. The Maharaja of.

Salutes of 11 *guns.*

Ajaigarh. The Maharaja of.
Alirajpur. The Raja of.
Baoni. The Nawab of.
Barwani. The Rana of.
Bijawar. The Maharaja of.
Bilaspur. The Raja of.
Cambay. The Nawab of.
Chamba. The Raja of.
Charkhari. The Maharaja of.
Chhatarpur. The Maharaja of.
Faridkot. The Raja of.
Gondal. The Thakur Saheb of.
Janjira. The Nawab of.
Jhabua. The Raja of.
Maler Kotla. The Nawab of.
Mandi. The Raja of.
Manipur. The Maharaja of.
Morvi. The Thakor Saheb of.
Narsinggarh. The Raja of.
Panna. The Maharaja of.
Pudukkottai. The Raja of.
Radhanpur. The Nawab of.
Rajgarh The Raja of.
Sailana. The Raja of.
Samthar. The Raja of.
Sirmur. The Maharaja of.
Sitamau. The Raja of.
Suket. The Raja of.
Tehri. The Raja of.

Salutes of 9 *guns.*

Balasinor. The Nawab (Babi) of.
Banganapalle. The Nawab of.
Bansda. The Raja of.
Baraundha. The Raja of.
Bariya. The Raja of.
Chhota Udepur. The Raja of.
Danta. The Maharana of.
Dharampur. The Raja of.
Dhrol. The Thakor Saheb of.
Fadthli (Shukra). The Sultan of.
Hsipaw. The Sawbwa of.
Jawhar. The Raja of.
Kalahandi. The Raja of.
Kengtung. The Sawbwa of.
Khilchipur. The Rao Bahadur of.
Kishn and Socotra. The Sultan of.
Lahej (or Al Hauta). The Sultan of
Limbdi. The Thakor Saheb of.
Loharu. The Nawab of.
Lunawada. The Raja of.
Maihar. The Raja of.
Mayurbhanj. The Maharaja of.
Möng Nai. The Sawbwa of.
Mudhol. The Raja of.
Nagod. The Raja of.
Palitana. The Thakor Saheb of.
Patna. The Maharaja of.
Rajkot. The Thakor Saheb of.
Sachin. The Nawab of.
Sangli. The Chief of.
Savantvadi. The Sar Desai of.
Shehr and Mokalla. The Sultan of.
Sonpur. The Maharaja of.
Sunth. The Raja of.
Vankaner. The Raj Saheb of.
Wadhwan. The Thakor Saheb of.
Yawnghwe. The Sawbwa of.

Personal Salutes.

Salutes of 21 *guns.*

Indore. His Highness Maharaja Yeshwant Rao *alias* Bala Saheb of.

Kalat. His Highness Mir Sir Mahmud Khan, G.C.I.E., Wali of.

Travancore. His Highness the Maharaja of.

Udaipur (Mewar). His Highness Maharajadhiraja Maharana Sir Fateh Singh Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., Maharana of.

Salutes of 19 *guns.*

Bikaner. Major-General His Highness Maharaja Sir Ganga Singh Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., K.C.B., A.D.C., Maharaja of.

Kotah. Lieutenant-Colonel His Highness Maharao Sir Umed Singh Bahadur, G.C.S.I., G.C.I.E., G.B.E., Maharao of.

*Mysore. Her Highness Maharani Kempa Nanjammanni Avaru Vanivilas Sannidhana, C.I., Maharani of.

Nepal. General His Highness Maharaja Sir Chandra Shumshere Jung Bahadur, Rana, G.C.B., G.C.S.I., G.C.M.G., G.C.V.O., D.C.L., Prime Minister, Marshal of.

Patiala. Major-General His Highness Maharaja dhiraja Sir Bhupindar Singh Mahinda Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E. A.D.C., Maharaja of.

Tonk. H. H. Amin-ud-Daula Wazir-ul-Mulk Nawab Sir Muhammad Ibrahim Ali Khan Bahadur Saulat Jang, G.C.S.I., G.C.I.E. Nawab of.

Salutes of 17 guns.

Alwar. Colonel His Highness Sewai Maharaj Shri Jey Singhji, G.C.I.E., K.C.S.I., Maharaja of

Dholpur. Lieutenant-Colonel His Highnss Maharajadhiraja Sri Sawai Maharaj-Rana Sir Udaibhan Singh Lokindar Bahadur Diler Jang Jai Deo, K.C.S.I., K.C.V.O., Maharaja Rana of.

Kishangarh. Lieutenant-Colonel His Highness Umdae Rajahae Baland Makan Maharajadhiraja Sir Madan Singh Bahadur, K.C.S.I. K.C.I.E., Maharaja of.

Orchha. His Highness Maharaja Mahindra Sawai Sir Pratap Singh Bahadur, G.C.S.I., G.C.I.E., Maharaja of.

Sirohi. His Highness Maharajadhiraja Maharao Sir Kesri Singh Bahadur, G.C.I.E., K.C.S.I., *Ex*-Maharao of.

Salutes of 15 guns.

Benares. Lieutenant-Colonel His Highness Maharaja Sir Parbhu Narayan Singh Bahadur, G.C.S.I., G.C.I.E., Maharaja of.

Jind. Lieutenant-Colonel His Highness Maharaja Sir Ranbir Singh Rajendra Bahadur, G.C.I.E., K.C.S.I., Maharaja of.

Junagadh. His Highness Vali Ahad Mohabat Khanji Rasulkhanji, Nawab of.

Kapurthala. Lieutenant-Colonel His Highness Maharaja Sir Jagatjit Singh Bahadur, G.C.S.I., G.C.I.E., Maharaja of.

Nawanagar. Lieutenant-Colonel His Highness Maharaja Shri Sir Ranjitsinhji Vibhaji, G.C.S.I., G.B.E., Maharaja of.

Salutes of 11 guns.

Aga Khan, His Highness Aga Sir Sultan Muhammad Shah, G.C.S.I., G.C.I.E., G.C.V.O., of Bombay.

Bariya. Captain H. H. Maharawal Shri Sir Ranjitsinhji Mansinhji, K.C.S.I., Raja of.

Chitral. His Highness Mehtar Sir Shuja-ul-Mulk, K.C.I.E., Mehtar of.

Lahej (Al Hauta). His Highness Sultan Sir Abdul Karim Fadthli bin Ali, K.C.I.E., Sultan of.

Lunawada. His Highness Maharana Shri Sir Wakhatsinghji Dalelsinghji, K.C.I.E., Raja of.

Sachin. Major His Highness Nawab Sidi Ibrahim Mohamed Yakut Khan, Mubazarat Daula Nasrat Jung Bahadur, Nawab of.

Shehr and Mokalla. H. H. Sultan Oomer bin Awad Alkaity, Shamseer Jung Bahadur, Sultan of.

Vankaner. Captain His Highness Raj Saheb Sir Amarsinhji Banesinhji, K.C.I.E., Raj Saheb of.

Salutes of 9 guns.

Dashahr. Raja Padam Singh, Raja of.

Dthala. Amir Nasr bin Shaif bin Sef bin Abdul Hadi, Amir of.

Jamkhandi. Captain Meherban Sir Parashramrav Ramchandrarav, K.C.I.E., Chief of.

Kanker. Maharajadhiraja Kamal Deo, Chief of.

Loharu. Nawab Sir Amir-ud-din Ahmad Khan Bahadur, K.C.I.E., *ex*-Nawab of.

Tawngpeng. Hkun Hsang Awn, K.S.M., Sawbwa of.

Local Salutes.

Salutes of 21 guns.

Bhopal. The Begam (or Nawab) of. Within the limits of her (or his) own territories, permanently.

Indore. The Maharaja (Holkar) of. Within the limits of his own territories, permanently.

Udaipur (Mewar). The Maharana of. Within the limits of his own territories, permanently.

Salute of 19 guns.

Bharatpur. The Maharaja of.
Bikaner. The Maharaja of.
Cutch. The Maharao of.
Jaipur. The Maharaja of.
Jodhpur (Marwar). The Maharaja of.
Patiala. The Maharaja of.
(Within the limits of their own territories, permanently.)

Salute of 17 guns.

Alwar. The Maharaja of.
Khairpur. The Mir of.
(Within the limits of their own territories permanently.)

Salutes of 15 guns.

Benares. The Maharaja of.
Bhavnagar. The Maharaja of.
Jind. The Maharaja of.
Junagadh. The Nawab of.
Kapurthala. The Maharaja of.
Nabha. The Maharaja of.
Nawanagar. The Maharaja of.
Ratlam. The Maharaja of.
(Within the limits of their own territories, permanently.)

Salutes of 13 guns.

Bushire. His Excellency the Governor of. At the termination of an official visit.

Janjira. The Nawab of. (Within the limits of his own territory, permanently.)

* Conferred in the first instance during the minority of her son, the Maharaja of Mysore, and in the capacity of Regent, and subsequently continued for her lifetime.

Salutes of 11 guns.

Savantvadi. The Sar Desai of..	Within the limits of his own territory, permanently.

Salutes of 5 guns.

Abu Dhabi. The Shaikh of	Fired by British Ships of War in the Persian Gulf at the termination of an official visit by this Chief.
Bunder Abbas. The Governor of .. .. Lingah. The Governor of .. .. .. Muhammerah. The Governor of	At the termination of an official visit.
Muhammerah. Eldest son of the Shaikh of ..	Fired on occasions when he visits one of His Majesty's ships as his father's representative.

Salutes of 3 guns.

Ajman. The Shaikh of .. .. Dibai. The Shaikh of .. .. Ras-al-Kheima. The Shaikh of .. .. .. Shargah. The Shaikh of .. .. Umm-ul-Qawain. The Shaikh of	Fired by Biritish Ships of War in the Persian Gulf at the termination of officia visits by these Chiefs.

TABLE OF LOCAL PERSONAL SALUTES.

Salutes of 11 guns.

His Excellency Shaikh Sir Isa bin Ali al Khalifah, K.C.I.E., C.S.I., Shaikh of Bahrain.	Fired by British Ships of War in the Persian Gulf at the termination of an official visit by this Chief.

(TABLE OF) PROVISIONAL LOCAL SALUTES.

Salutes of 17 guns.

Council of Ministers (as a whole) of His Highness the Sultan of Muscat.

Salutes of 13 guns.

The President of the Council of Ministers of His Highness the Sultan of Muscat, when a member of the ruling family.

Salutes of 9 guns.

The President of the Council of Ministers of His Highness the Sultan of Muscat when not a member of the ruling family.

Salutes of 7 guns.

Bahrain. The Shaikh of.
Kuwait. The Shaikh of.
Muhammerah. The Shaikh of.
Qatr. The Shaikh of.

Salutes of 5 guns.

Bahrain. Eldest son of the Shaikh of, or other member of the ruling family. Kuwait. Eldest son of the Shaikh of, or other member of the ruling family.	Fired when acting as Deputy of these Chiefs.

Individual Members of the Council of Ministers of His Highness the Sultan of Muscat.

(TABLE OF) PROVISIONAL PERSONAL SALUTES.

Salutes of 13 guns.

His Excellency Shaikh Sir Khaz'al Khan, G.C.I.E., K.C.S.I., Shaikh of Muhammerah.	Fired by British Ships of War in the Persian Gulf at the termination of an official visit by this Chief

Indian Orders.

The Star of India.

The Order of the Star of India was instituted by Queen Victoria in 1861, and enlarged in 1866, 1876, 1897, 1902 and 1911, and the dignity of Knight Grand Commander may be conferred on Princes or Chiefs of India, or upon British subjects for important and loyal service rendered to the Indian Empire; the second and third classes for services in the Indian Empire of not less than thirty years in the department of the Secretary of State for India. It consists of the Sovereign; a Grand Master (the Viceroy of India), the first class of forty-five Knights Grand Commanders (23 British and 22 Indian), the second class of one hundred Knights Commanders, and the third class of two hundred and twenty-five Companions, exclusive of Extra and Honorary Members, as well as certain additional Knights and Companions.

The Insignia are (i) the Collar of gold, composed of the lotus of India, of palm branches tied together in satire, of the united red and white rose, and in the centre an Imperial Crown; all enamelled in their proper colours and linked together by gold chains. (ii) The Star of a Knight Grand Commander is composed of rays of gold issuing from a centre, having thereon a star of five points in diamonds resting upon a light blue enamelled circular riband, tied at the ends and inscribed with the motto of the Order, *Heaven's Light our Guide*, also in diamonds. That of a Knight Commander is somewhat different, and is described below. (iii) The Badge, an onyx cameo having Her Majesty Queen Victoria's Royal Effigy thereon, set in a perforated and ornamental oval, containing the motto of the Order surmounted by a star of five points, all in diamonds. (iv) The Mantle of light blue satin lined with white, and fastened with a cordon of white silk with blue and silver tassels. On the left side a representation of the Star of the Order.

The ribbon of the Order (four inches wide for Knights Grand Commanders) is sky-blue, having a narrow white stripe towards either edge, and is worn from the right shoulder to the left side. A Knight Commander wears (a) around his neck a ribbon two inches in width of the same colours and pattern as a Knight Grand Commander, and pendent therefrom a badge of a smaller size, (b) on his left breast a Star composed of rays of silver issuing from a gold centre, having thereon a silver star of five points resting upon a light blue enamelled circular ribbon, tied at the ends, inscribed with the motto of the Order in diamonds. A Companion wears from his left breast a badge of the same form as appointed for a Knight Commander, but of a smaller size pendent to a like ribbon of the breadth of one and a half inches. All Insignia are returnable at death to the Central Chancery, or if the recipient was resident in India, to the Secretary of the Order at Calcutta.

Sovereign of the Order:—His Most Gracious Majesty The King-Emperor of India.

Grand Master of the Order:—His Excellency the Viceroy and Governor-General of India, the Right Honourable Lord Irwin, P.C., G.M.S.I., G.M.I.E.

Officers of the Order:—*Registrar*: Col. the Hon. Sir George Arthur Charles Crichton, K.C.V.O., Secretary of the Central Chancery of the Orders of Knighthood, St. James' Palace, London, W. 1.

Secretary: The Hon'ble Mr. B. J. Glancy, C.I.E., Secretary to the Government of India in the Foreign and Political Department.

Extra Knights Grand Commanders (G. C. S. I.)

H. I. M. the Queen-Empress
H. R. H. The Duke of Connaught
H. R. H. The Prince of Wales

Honorary Knights Commanders (K. C. S. I.)

His Excellency Shaikh Sir Khaz'al Khan, G.C.I.E., Sardar Aqdas, Shaikh of Muhammareh and dependencies.
Prince Ismail Mirza, Motamad-ed-Dowleh Amir-i-Akram, son of His Royal Highness the late Sultan Sir Massoud Mirza, Yemin-ed-Dowleh, Zil-es-Sultan of Persia.
Honorary Colonel Supradipta Manyabar His Excellency General Sir Bhim Shum Shere Jung, Bahadur Rana, K.C.V.O., Commander-in-Chief of Nepalese Army (Nepal).
Honorary Colonel supradipta Manyabar General Sir Baber Shum Shere Jung, Bahadur Rana, G.B.E., K.C.I.E., of Nepalese Army (Nepal).

Honorary Companions.

H. E. Shaikh Sir Isa bin Ali al Khalifah, K.C.I.E., Shaikh of Bahrain and Dependencies.
H. H. Saiyid Sir Taimur bin Faisal bin-us-Saiydi Turki, K.C.I.E., Sultan of Masqat and Oman.
Shaikh Hamad bin Isa al Khalifah, son of the Sheikh of Bahrain.

Knights Grand Commanders (G. C. S. I.)

H. H. the Gaekwar of Baroda
H. H. the Maharana of Udaipur
Baron Harris
H. H. the Raja of Cochin
Baron Ampthill
Maharaja Sir Chandra Shum Shere Jung Bahadur, Prime Minister, Marshal and Supreme Commander-in-Chief of Nepal
H. H. the Maharaja of Orchha
H. H. the Maharaja of Mysore
Baron Hardinge of Penshurst
H. H. the ex-Begum of Bhopal
Baron Sydenham
Sir Arthur Lawley
Sir John Hewett
H. H. the Maharaja of Bikaner
H. H. Maharao of Kotah
General Sir Edmund George Barrow
H. H. the Maharaja of Kapurthala
His Exalted Highness the Nizam of Hyderabad
H. H. the Aga Khan
H. H. the Nawab of Tonk
H. H. the Maharao of Cutch
Baron Willingdon
H. H. The Maharaja of Benares
H. H. The Maharaja of Patiala
H. H. The Nawab of Rampur
Lord Chelmsford
General Sir Charles Monro
The Marquess of Reading
The Earl of Ronaldshay
H. H. The Maharaja Jam Sahib of Navanagar
The Maharaja of Alwar
Baron Lloyd
Viscount Inchcape
Viscount Lee of Fareham
The Earl of Lytton
Sir Harcourt Butler
Sir Leslie Wilson

Knights Commanders (K. C. S. I.)

Sir Joseph West Ridgeway
Sir Phillip Perceval Hutchins
Sir William John Cunningham
Sir Henry Martin Winterbotham
Sir James Monteath
Lieut.-Col. Sir Donald Robertson
Sir Hugh Shakespear Barnes
Sir Arundel Tagg Arundel

Sir Arthur Henry Temple Martindale
Sir James Thomson
Sir Joseph Bampfylde Fuller
Lieut.-Col. Arthur John, Baron Stamfordham
Sir Charles Stuart Bayley
H. H. Maharaj Rana of Jhalawar
H. H. Raja of Jind
Sir George Stuart Forbes
H. H. Raja of Ratlam
Sir Harvey Adamson
Nawab of Murshidabad
Sir John Ontario Miller
Sir Lionel Montague Jacob
Sir Murray Hammick
Sir Leslie Alexander Selim Porter
Sir Robert Warrand Carlyle
Sir Reginald Henry Craddock
Sir James McCrone Douie
Lord Meston of Agra and Dunottar
Sir Benjamin Robertson
Maharajadhiraja of Burdwan
Sir Elliot Graham Colvin
Sir Trevredyn Rashleigh Wynne
H. H. Maharaja of Dewas State (Senior Branch)
Sir John Nathaniel Atkinson
Sir William Thomson Morison
Sir M. F. O'Dwyer
Sir Saiyid Ali Imam
Sir Michael William Fenton
Colonel Sir Sidney Gerald Burrard
Sir William Henry Solomon
F.-M. Sir W. R. Birdwood.
Sir P. Sundaram Aiyar Sivaswami Aiyar
Sir Edward Albert Gait
H. H. Nawab of Maler Kotla
H. H. Maharaja of Sirmur
Sir William Henry Clark
Major-General Sir Percy Zachariah Cox
Sir Steyning William Edgerley
Sir Harrington Verney Lovett
Sir Robert Woodburn Gillan
Maharaj Sri Sir Bhairon Singh Bahadur
Sir Alexander Gordon Cardew
Lieut.-Col. Sir Hugh Daly
Sir C. H. A. Hill
H. H. Maharaja Sir Malhar Rao Baba Saheb Puar, Maharaja of Dewas (Junior Branch)
H. H. The Maharaja of Dhrangadhra
Lieut.-Col. Sir F. E. Younghusband
Sir T. Morison
Lieut.-Gen. G. M. Kirkpatrick
Major-Gen. R. C. O. Stuart
Sir George Rivers Lowndes
H. H. Maharajadhiraja Maharawal Sir Jowahir Singh Bahadur of Jaisalmer
Sir Archdale Earle
Sir Stuart Mitford Fraser
Sir John Strathedan Campbell
H. H. the Maharaja of Datia
H. H. the Maharaj Rana of Dholpur
Lieut.-General Sir William Raine Marshall
Sir William Vincent
Sir Thomas Holland
Sir James Bennett Brunyate
Sir Sydney Arthur Taylor Rowlatt
Sir Oswald Vivian Bosanquet
Gen. Sir Alexander Stanhope Cobbe
Sir G. Carmichael
Dr. Sir M. E. Sadler
Major-Gen. Sir Harry Triscott Brooking
Major-Gen. Sir George Fletcher MacMunn
The Right Hon'ble Lord Southborough
Lieut.-Colonel Maharaja Sir Daolat Singhji o Idar
Sir George Barnes
Sir Edward Maclagan
Sir William Marris
Sir N. D. Beatson-Bell
Sir L. J. Kershaw
Sir G. S. Curtis
Sir L. Davidson
The Hon'ble Sir C. G. Todhunter
Sir Henry Wheeler
H. E. Sir H. R. C. Dobbs
Captain His Highness Maharawal Shri Sir Ranjitsinghji Mansinghji, Raja of Baria, Bombay.
Khan Bahadur Doctor Mian Sir Muhammad Shafi
H. E. Sir William Malcolm Hailey
Sir Hamilton Grant
The Hon'ble Khan Bahadur Maharaja* Sir Muhammad Ali Muhammad Khan, Raja of Mahmudabad.
Sir Jamsetjee Jeejeebhoy, Bart.
H. E. Sir John Henry Kerr
Dr. Sir Tej Bahadur Sapru
Major-General Sir Havelock Charles
Rao Bahadur Sir B. N. Sarma
The Hon'ble Sir Ibrahim Rahimtula
The Hon. Sir Charles Innes
General Sir C. W. Jacob
The Maharao of Sirohi
H. E. Sir Montagu Butler
H. H. The Maharaja of Rajpipla
Sir Frederick Nicholson.
H. H. The Maharaja of Jodhpur
Sir Frederic Whyte
The Hon'ble Sir Maurice Hayward
Sir Abdur Rahim
H. H. the Maharaja of Bharatpur
H. H. the Nawab of Junagadh
The Hon'ble Sir Basil Blackett
H. E. Sir Henry Lawrence
H. H. The Maharaja of Rewa
Sir Bhupendranath Mitra.
Sir Chunilal V. Mehta.
Sir S. P. O'Donnel.
Sir Hugh Lansdown Stephenson
Sir Egbert Laurie Lucas Hammond
The Hon'ble Khan Bahadur Sir Muhammad Habibullah
Sir William John Keith
Nawab Sir Sidiq Muhammad Khan of Bahawalpur.

Companions (C. S. I.)

Col. Charles Edward Yate
Lieut.-Col. Henry St. Patrick Maxwell
Sir Arthur Upton Fanshawe
James Fairbairn Finlay
Henry Aiken Anderson
Lieut.-Col. Sir Arthur Henry McMahon
Charles William Odling
David Norton
Sir Edward Richard Henry
Henry Farrington Evans
Sir Frederick Styles Philpin Lely
George Robert Irwin
Lieut.-Gen. Sir George Lloyd Reilly Richardson
Charles Gerwien Bayne
Hartley Kennedy
William Charles Macpherson

* Personal: hereditary title is Raja.

Col. James Alexander Lawrence Montgomery
Col. James White Thurburn
William Thomas Hall
Richard Townsend Greer
Sir Louis William Dane
Hermann Michael Kisch
Sir Cecil Michael Wilford Brett
Sir Frank Campbell Gates
John Mitchell Holms
Lt.-Col. Willoughby Pitcairn Kennedy
Raja Narendra Chand
Arthur Delaval Younghusband
Oscar Theodore Barrow
Francis Alexander Slacke
Percy Comyn Lyon
Algernon Robert Sutherland
Sir George Watson Shaw
William Arbuthnot Inglis
Romer Edward Younghusband
Major-General Sir Herbert Mullaly
John Alexander Broun
Col. Henry Finnis
Maurice Walter Fox-Strangways
William Lochiel Sapte Lovett Cameron
Maj.-Gen. Sir Henry Montague Pakington Hawkes
Francis Capel Harrison
Comdr. Sir Hamilton Pym Freer-Smith
Andrew Edmund Castlestuart Stuart
Norman Goodford Cholmeley
Walter Francis Rice
Sir Havilland LeMesurier
Cecil Edward Francis Bunbury
Major-General Reginald Henry Mahon
Rear-Admiral Allen Thomas Hunt
Henry Walter Badock
Sir John Walter Hose
Charles Ernest Vear Goument
George Moss Harriott
Ernest Herbert Cooper Walsh
Sir Edward Vere Levinge
Lieut.-Col. Charles Archer
James Peter Orr
Herbert Alexander Casson
William Axel Hertz
Sir Mahadev Bhaskar Chaubal
Brevet-Colonel Clive Wigram
Herbert Thompson
Lieut.-Col. Sir John Ramsay
Stuart Lockwood Maddox
Dr. Sir Gilbert Thomas Walker
Lieut.-Col. Phillip Richard Thornhagh Gurdon
The Hon'ble Khan Sir Zulfikar Ali Khan
Surgeon-General George Francis Angelo Harris
Major Edmund Vivian Gabriel
Sir John Stuart Donald
Henry Montague Segundo Mathews
Arthur Crommelin Hankin
Nawab Sir Faridoon Jang Bahadur
Maulvi Sir Ahmad Hussain Nawab Amir Jang Bahadur
Sir Horace Charles Mules
H. H. Raja Sir Bije Chand, Raja of Bilaspur
Lieut.-Col. Arthur Russell Aldridge
Lieut.-Col. Sir Mathew Richard Henry Wilson
John Charles Burnham
Col. Thomas Francis Bruce Renny-Tailyour
Michael Kennedy
Col. Alain Chartier de Lotbiniere Joly de Lotbiniere
Col. Robert Smeiton Maclagan
Lieut.-Col. Charles Mowbray Dallas
Edward Henry Scamander Clarke
Sir Jagadish Chandra Bose
Mirza Sir Abbas Ali Baig
Oswald Campbell Lees
Lieut.-Col. Albert Edward Woods
William Exall Tempest Bennett
William Ogilvie Horne
William Harrison Moreland
Col. Lestock Hamilton Reid
Surg.-Gen. Henry Wicknam Stevenson
Honorary Lieut.-Col. Raja of Lambagraon
Lieut.-Col. Donald John Campbell MacNabb
Lieut.-Col. Henry Walter George Cole
Henry Venn Cobb
Frederick William Johnston
William Henry Lucas
Arthur Leslie Saunders
Raja Sir Daljit Singh of Jullunder
Sir Walter Maude
Sir Henry Ashbrooke Crump
Sir William James Reid
Walter Gunnell Wood
John Cornwallis Godley
A. Butterworth
Lt.-Col. F. H. Elliott
The Hon'ble Sir Herbert John Maynard
Lt.-Col. A. B. Dew
Sir Hugh T. Keeling
Sir Henry Sharp
Sir Robert R. Scott
Col. Sir J. W. E. Douglas-Scott Montagu Beaulieu
Rear-Admiral Arthur Hayes-Sadler
Laurence Robertson
Sir John Ghest Cumming
Lieut.-Col. Stephen Lushington Aplin
Sir James Houssemayne DuBoulay
Sir John Barry Wood
Major-General Sir Arthur Wigram Money
T. A. Chalmers
C. C. Watson, I.C.S.
Lt.-Colonel T. H. Keynes
R. J. S. Dodd
Major H. G. Vaux
R. Burn
Sir Godfrey B. H. Fell
Major-General Sir W. C. Knight
Lt.-Col. Sir Cecil Kaye
Sir Patrick James Fagan
Col. Sir Hormasji Edulji Banatwalla, I.M.S.
Lt.-Col. Lawrence Impey
Col. Benjamin William Marlow
Lt.-Col. Harold Fenton Jacob
Lt.-Col. Francis Beville Prideaux
Lt.-Col. Stuart George Knox
Col. Sir Hugh Whitchurch Perry
Henry Cecil Ferard
Charles Evelyn Arbuthnot William Oldham
Sir Evan Maconochie
Francis Coope French
Lieut.-General Sir Charles W. G. Richardson
Lt.-Col. A. P. Trevor
Sir Horatio Norman Bolton
Major-General J. C. Rimington
Colonel H. R. Hopwood
Brig.-General R. H. W. Hughes
L. E. Buckley
C. H. Bompas
M. M. S. Gubbay
Lieut-Gen. Sir Richard Wapshare

Major-Gen. J. M. Walter
Brig.-General W. G. Hamilton
Lieut.-Col. A. W. N. Taylor
Major Sir Alexander J. Anderson
Major-General Sir Theodore Fraser
Brig.-General W. N. Campbell
Col. Thomas A. Harrison
Major-General L. C. Dunsterville
Sir Hugh McPherson
Sir Henry Fraser Howard
Lieut.-Col. Herbert Des Voeux
Col. Charles Rattray
Evelyn Berkeley Howell
Major-General Felix Fordati Ready
Col. Herbert Evan Charles Bayley Nepean
Lieut.-Col. Patrick Robert Cadell
Lieut.-Col. Montagu William Douglas
Colonel Charles Mactaggart
The Hon'ble Sir John Perronet Thompson
Richard Meredith
Sir Manubhai Nandshankar Mehta
Lieut.-Col. Sir Thomas Wolseley Haig
Herman Cameron Norman
The Hon'ble Sir Reginald Arthur Mant
Colonel Alexander John Henry Swiney
Major-General James Wilton O'Dowda
Brevet-Lieut.-Col. Sir Arnold Talbot Wilson
Colonel (temporary Colonel-on-the-staff) Charles Ernest Graham Norton
Captain Wilfrid Nunn
Major-General Hubert Isacke
Colonel Stewart Gordon Loch
Colonel (temporary Brigadier-Gen.) William Kelty McLeod
Col. Frederick James Moberly
Brigadier-Gen. Robert Fox Sorsbie
Colonel Alan Edmondson Tate
Major-Gen. William Cross Barratt
Temporary Brigadier-General Sir Edward Hugh Bray
Col. (Honorary Brigadier-Gen.) Arthur Howarth Pryce Harrison
Colonel (temporary Major-Gen.) Frank Ernest Johnson
Major-General Robert Archibald Cassels
Frederick Campbell Rose
Sir Selwyn Howe Fremantle
Peter William Monie
Major-General Charles Astley Fowler
Major-General Harold Hendley
Colonel Michael Edward Willoughby
Major-General Edward Arthur Fagan
Colonel Herbert William Jackson
Lt.-Col. Arthur Leslie Jacob
The Hon'ble William Pell Barton
C. F. Payne
Colonel J. L. Rieu
W. J. J. Howley
Sir Bentram P. Standen
Sir John L. Maffey
Lieut.-Col. J. L. W. F. French-Mullen
Lt.-Col. J. L. R. Gordon, C.B.
Colonel C. W. Profeit
H. H. the Nawab of Bhopal
H. M. R. Hopkins
R. A. Graham
Claud Alexander Barron
Sir George Rainy
Sir Geoffrey R. Clarke
Lieut.-Col. D. Donald
Khan Bahadur Sardar Muhammad Ali Khan Qizilbash of Lahore
Col. G. B. M. Sarel
Col. F. E. Coningham
Col. D. A. D. McVean
Col. H. G. Burrard
Col. J. H. Foster Lakin
Col. (temporary Col.-Comdt.) G. A. H. Beatty.
Sir Robert Holland
C. J. Hallifax
Major-General H. F. Cooke
Lieut.-Col. E. M. Proes
L. T. Harris
Sir Albion Rajkumar Banerji
The Hon'ble Sir Reginald Glancy
W. R. Gourlay
Major-General K. Wigram, I. A.
Rai Bahadur Dewan Bishan Das
Captain H. H. Raja Narendra Sah, of Tehri (Garhwal).
The Hon'ble Sir Arthur Rowland Knapp
Sir Norman Edward Marjoribanks
Sir Denys de Saumarez Bray
Charles Montagu King
Rai Bahadur Raja Pandit Hari Kishan Kaul of the Punjab
S. R. Hignell
James Crerar
Colonel S. F. Muspratt
W. E. Copleston
Frederick B. Evans
Colonel-Comdt. Rivers Berney Worgan, C.V.O.
Major-General W. C. Black
G. R. Lambert
B. C. Allen
J. E. Webster
T. E. Moir
Diwan Bahadur Raghunatha Rao Ram Chandra Rao Avargal
Major C. C. J. Barrett
Sirdar Bahadur Nawab Mehrab Khan, Chief of Bugti Tribe
Sir Godfrey John Vignoles Thomas, Bart.
Capt. Dudley Burton Napier North
Sir Edward M. Cook, I.C.S.
F. C. Griffith
Maharaj Shri Fateh Singh
J. Hullah
The Hon'ble Mr. S. E. Pears
Sir John F. Campbell
J. Milne
The Hon'ble Sir James Donald
Lt.-Col. Sir W. F. T. O'Connor
E. S. Lloyd
L. F. Morshead
H. D. Craik
S. A. Smyth
Colonel W. H. Jefferey
C. G. Adam
Diwan Bahadur T. Raghavayya Pantulu Garu.
Raja Ejaz Rasul Khan of Jehangirabad
D. H. Lees
H. P. Tollinton
A. W. McNair
F. Noyce
W. Sutherland
Captain E. J. Headlam
S. F. Stewart
D. T. Chadwick
M. E. Couchman
F. G. Pratt
R. Oakden

The Hon'ble Major-General T. H. Symons
F. Lewisohn
W. P. Sangster
T. Emerson
A. H. Ley
E. Burdon
The Hon'ble Mr. J. E. B. Hotson
A. W. Pim
The Hon'ble Mr. A. W. Botham
G. G. Sim
L. Birley
N. Macmichael
A. Y. G. Campbell
Lieut.-Col. S. B. A. Patterson.
The Hon'ble Mr. J. T. Marten
B. Foley
A. Langley
Lieutenant Colonel M. L. Ferrar
The Hon'ble Mr. L. W. Reynolds
H. G. Stokes
Rana Bhagal-bhand, Raja of Jubba
J. C. Ker
M. G. Simpson
J. D. Sifton, I.C.S.
Michael Keane, I.C.S.
Lt.-Colonel C. C. E. Bruce
R. T. Harrison
C. T. Mullings.

The Most Eminent Order of the Indian Empire.

This Order, instituted by H. M. Queen Victoria, Empress of India, Jan. 1st, 1878, and extended and enlarged in 1886, 1887, 1892, 1897, and 1902 is conferred for services rendered to the Indian Empire, and consists of the Sovereign, a Grand Master, forty Knights Grand Commanders (of whom the Grand Master is first and principal), one hundred and forty Knights Commanders, and an indefinite number of Companions (not exceeding, without special statute, 20 nominations in any one year); also Extra and Honorary Members over and above the vacancies caused by promotion to a higher class of the Order, as well as certain Additional Knights and Companions appointed by special statute Jan. 1st, 1909, commemorative of the 50th Anniversary of the assumption of Crown Govt. in India.

The Insignia are: (*i*) The COLLAR of gold formed of elephants, lotus flowers, peacocks in their pride, and Indian roses, in the centre the Imperial Crown, the whole linked together with chains; (*ii*) The STAR of the Knight Grand Commander, comprised of five rays of silver, having a small ray of gold between each of them, the whole alternately plain and scaled, issuing from a gold centre, having thereon Her Majesty Queen Victoria's Royal Effigy, within a purple circle, edged and lettered gold, inscribed *Imperatricis Auspiciis*, and surmounted by an Imperial Crown gold; (*iii*) The BADGE consisting of a rose, enamelled gules, barbed vert, and having in the centre Her Majesty Queen Victoria's Royal Effigy, within a purple circle, edged and lettered gold, inscribed *Imperatricis Auspiciis*, surmounted by an Imperial Crown, also gold; (*iv*) The MANTLE is of Imperial purple satin, lined with and fastened by a cordon of white silk, with purple silk and gold tassels attached. On the left side a representation of the Star of the Order.

A Knight Commander wears: (*a*) around his neck a ribbon two inches in width, of the same colour (purple) and pattern as a Knight Grand Commander, pendent therefrom a badge of smaller size: (*b*) on his left breast a star, similar to that of the first class, but the rays of which are all of silver.

The above mentioned Insignia are returned at death to the Central Chancery, or if the Knight was resident in India to the Secretary of the Order at Calcutta.

A Companion wears from the left breast a badge (not returnable at death) of the same form as appointed for a Knight Commander, but of smaller size, pendent to a like ribbon of the breadth of one and a half inches.

Sovereign of the Order:—His Most Gracious Majesty The King-Emperor of India.

Grand Master of the Order:—H. E. the Viceroy Lord Irwin.

Officers of the Order:—The same as for the Order of the Star of India.

Extra Knight Grand Commanders (G. C. I. E.)

The Duke of Connaught
H. R. H. The Prince of Wales

Honorary Knights Grand Commanders (G. C. I. E.)

H. E. Shaikh Sir Khazal Khan, Shaikh of Mohammerah and Dependencies.
H. H. Imam Sir Abdul Aziz bin Abdur Rahman bin Faisal-al-Saud Sultan of Nejd and Dependencies.

Honorary Knights Commanders (K. C. I. E.)

Sir Leon E. Clement-Thomas
Dr. Sir Sven Von Hedin
Cavaliere Sir Filippo De'Filippi
Honorary Colonel Supradipta Manyabar, General Sir Baber Shumshere Jung Bahadur Rana of Nepal
General Sir Judha Shumshere Jung Bahadur Rana of Nepal
H. H. Sultan Sir Abdul Karim Fadthli bin Ali, Sultan of Lahej
Sir Alfred Martineau
Commanding General Sir Padma Shum Shere Jung Bahadur, Rana of Nepal
Genl. Sir Tez Shum Shere Jung Bahadur, Rana of Nepal
H E. The Shaikh of Bahrein and Dependencies
H. E. General Sir Yang-tseng-hsin, Chiang Chun and Governor of Hsin Kiang Province
General Sir Mohan Shumshere Jung Bahadur, Rana of Nepal.
H. H. Saiyid Sir Taimur bin Faisal bin-us-Saiyid Turki, C.S.I., Sultan of Muscat and Oman.

Knights Grand Commanders (G.C.I.E.)

H. H. The Maharao of Cutch
Lord Harris
H. H. The Nawab of Tonk
H. H. The Wali of Kalat
H. H. The Maharaja of Gondal
H. H. The Maharaja of Benares
H. H. The Maharaja of Orchha
Lord Ampthill
H. H. The Aga Khan
Lord Lamington
H. H. The ex-Begum of Bhopal

Lt.-Col. Sir Edmond Elles
Sir Walter Laurence
Sir Arthur Lawley
H. H. The Maharaja of Bikaner
H. H. The Maharao of Kotah
Lord Sydenham
H. H. The Nawab of Rampur
Maharaja Peshkar Sir Kishan Parsha
Lord Hardinge
Sir Louis Dane
Lord Stamfordham
Sir Guy Fleetwood Wilson
H. H. The Maharana of Udaipur
H. H. The Maharaja of Patiala
H. H. The Raja of Cochin
Lord Willingdon
The Yuvaraja of Mysore
Sir Charles Stuart Bayley
Maharaja of Darbhanga
H. H. the Maharaja of Jind
Lord Chelmsford
The Earl of Ronaldshay
Sir Michael Francis O'Dwyer
Sir Gulam Muhammad Ali, Prince of Arcot
Major-General Sir Percy Zachariah Cox
H. H. Tukoji Rao III, ex-Maharaja of Indore
H. H. The Maharaja of Cochin
H. E. Sir George Ambrose Lloyd
H. H. The Maharaja of Baroda
H. H. The Maharaja of Alwar
H. H. The Maharaja of Kapurthala
The Marquess of Reading
Lord Lytton
H. H. The Maharaja of Dhrangadhra.
The Right Hon'ble Rowland Thomas Baring Earl of Cromer, C.V.O.
Sir William Henry Hoare Vincent, K.C.S.I., KT., I.C.S.
Sir Harcourt Butler
Sir Reginald Craddock.
Rt. Hon. Sir Leslie Orme Wilson
Maharajadhiraja Sir Bijay Chand Mahtab Bahadur of Burdwan
H. E. Viscount Goschen
H. H. The Maharaja of Kolhapur.
H. E. The Rt. Hon. Sir Francis Stanley Jackson.
H. E. Sir Malcolm Hailey.
H. H. Maharaja Sir Hari Singh of Kashmir

Knights Commanders (K. C. I. E.)

Sir Arthur Baron Carnock
H. H. The Raja of Lunawara
Sir Edward Charles Kayll Ollivant
Sir Henry Seymour King
Baron Inchcape
Ex-Nawab of Loharu
Sir Mancherji Bhownaggree
Col. Sir Thomas Holdich
Sir Andrew Wingate
Raja Sir Harnam Singh, Ahluwalia
Sir Alexander Cunningham
Sir James George Scott
Sir Lawrence Hugh Jenkins
Sir Herbert Thirkell White
Sir Frederick Augustus Nicholson
Sir Arthur Upton Fanshawe
Raja of Shahpura
Sir Gangadharrav Ganesh, Chief of Miraj (Senior Branch)
Brevet-Col. Sir Buchanan Scott
Col. Sir John Walter Ottley
Lieut.-Col. Sir Francis Edward Younghusband
Sir Fredric Styles Philpin Lely
Lt.-Col. Sir Arthur Henry McMahon
Sir Francis Whitmore Smith
Dr. Sir Thomas Henry Holland
Nawab Sir Muhammad Ali Beg
Raja of Mahmudabad
Sir Trevredyn Rashleigh Wynne
Sir Richard Morris Dane
Sir Theodore Morison
Gen. Sir Robert Irvin Scallon
Sir Archdale Earle
Sir Charles Stewart-Wilson
Gen. Sir Malcolm Henry Stanley Grover
Sir Charles Rait Cleveland
Lieut.-Col. Sir Hugh Daly
Sir Henry Parsall Burt
Sir James Houssemayne DuBoulay
Sir Rajendra Nath Mukharji
Lieut.-Col. Sir Henry Beaufoy Thornhill
Sir Gangadhar Madho Chitnavis
H. H. The Nawab of Jaora
H. H. The Raja of Sitamau
H. H. The Raj Saheb of Wankaner
Rear-Adm. Sir Colin Richard Keppel
Sir John Stanley
Sir Saint-Hill Eardley-Wilmot
Sir Francis Edward Spring
H. H. The Maharawal of Partabgarh
H. H. The Maharaja of Bijawar
Sir John Twigg
Sir George Abraham Grierson
Dr. Sir Marc Aurel Stein
Sir Henry Alexander Kirk
Dr. Sir Alfred Gibbs Bourne
Sir Frank Campbell Gates
Sir George Macarthey
Sir Edward Douglas Maclagan
Maj.-Gen. Sir George John Younghusband
Sir Brian Egerton
Sir Stephen George Saie
Sir Prabhashankar D. Pattani
Maharaja of Kasimbazar
Lieut.-Col. Sir John Ramsay
Sir William Maxwell
Sir Faridoonji Jamshedji, C.S.I.
Sir Mokshagundam Visvesvaraya
His Highness the Maharaja of Samthar
Sir John Stuart Donald
Lieut.-Col. Sir Percy Molesworth Sykes
Sir Edward Vere Levinge
The Hon'ble Raja Sir Rampal Singh of Kuri Sudhauli
Sir Alexander Henderson Diack
The Hon'ble Lt.-Col. Nawab Malik Sir Umar Hayat Khan Tiwana
Sir Robert Bailey Clegg
H. E. Sir Henry Wheeler
Sir Mahadeo B. Chaubal
Sir James Walker
Mirza Sir Abbas Ali Baig
H. H. the Raja of Bilaspur
Khan Bahadur Nawab Sir Sahibzada Abdul Qaiyum
Lieut.-Gen. Sir Raleigh Gilbert Egerton
Lieut.-Gen. Sir Henry D'Urban Keary
Sir George Cunningham Buchanan
Major-Gen. Sir William George Lawrence Beynon
H. H. The Raja of Rajgarh
Rana of Barwani
Maharaja of Sonpur
H. H. The Maharaja of Jammu and Kashmir

Sir John Barry Wood
Sir Alfred Hamilton Grant
Thakur Saheb of Rajkot
Lieut.-Col. Maharaja* Sir Jai Chand, Raja of Lambargaon
Rear-Admiral Sir D. St. A. Wake
Lieut-Gen. Sir Alfred Horsford Bingley
Sir Godfrey Butler Hunter Fell
Lieut.-Gen. Sir Thomas Joseph O'Donnell
Major-Gen. Sir Godfrey Williams
Sir Nicholas Dodd Beatson Bell
Sir William Sinclair Marris
His Highness Mehtar Sir Shuja-ul-Mulk Mehtar of Chitral
Maulvi Sir Rahim Bakhsh
Sir James Herbert Seabrooke
Sir C. E. Low, I.C.S.
Maharaj Kunwar Sir Bhopal Singh
Khan Bahadur Nawab Sir Mir Shams Shah, I.S.O.
Lieut.-Gen. Sir Edward Locke Elliot
Lieut.-Gen. Sir Edward Altham Altham
Lieut.-Gen. Sir Charles Alexander Anderson
Gen. Sir Havelock Hudson
Major-Gen. Sir Wyndham Charles Knight
Major-Gen. Sir Herbert Aveling Raitt
Sir Herbert Guy Dering
Major-Gen. Sir H. F. E. Freeland
Baron Montagu of Beaulieu
Brevet-Lieut.-Col. Sir Arnold Talbot Wilson
2nd-Lt. Meherban Sir M. V. Raje Ghorpade, Raja of Mudhol
Sir W. Maude, I.C.S.
Rai Bahadur Sir Bepin Krishna Bose, Kt.
Sir C. M. Stevenson Moore, I.C.S.
Lieut.-Gen. Sir Richard Wapshare
Major-Gen. Sir Willfrid Malleson
Major-Gen. Sir Patrick Hehir
Sir J. G. Cumming
The Hon'ble Sir H. J. Maynard
H. H. The Nawab of Palanpur
Lieut.-Gen. Sir Andrew Skeen
H. H. The Maharaja of Sirmur
H. H. The Nawab of Malerkotla
H. E. Sir H. R. C. Dobbs
The Thakor Saheb of Limbdi
Sir H. A. Crump
Sir W. D. Sheppard
Lt.-Col. Sir A. B. Dew
Nawab Sir Khan-I-Zaman Khan, Nawab of Amb
Raja Sir Muhammad Nazim Khan, Mir of Hunza
Col. Sir W. H. Willcox
H. H. The Maharaja of Panna
Sir H. Le Mesurier
Sir P. J. Fagan
Sir Norcot Warren
Raja Sahib Sri Sir Govinda Krishna Yachendruluvaru of Venkatagiri
Sir C. A. Bell
Maulvi Sir Ahmad Husain Nawab Amin Jang Bahadur
Sir John H. Biles
Lieutenant-Colonel Sir T. W. Haig
H. E. Sir John Henry Kerr
Vice-Admiral Sir Lionel Halsey
H. H. The Maharaja of Sikkim
The Chief of Sangli
Major Nawab Malik Sir Khuda Bakhsh Khan Tiwana
Sir H. F. Howard
Sir A. R. Knapp
H. E. Sir H. L. Stephenson
The Hon'ble Sir R. A. Mant
The Hon'ble Sir B. N. Mitra
The Hon'ble Khan Bahadur Nawab Sir Muhammad Muzammil-ullah Khan of Bhikrampur, U. P.
Sir Chimanlal H. Setalvad
The Hon'ble Khan Bahadur Sir Muhammad Habibulla Sahib Bahadur
Sir H. McPherson
Sir W. J. Reid
Sir E. M. D. Chamier
Sir A. C. Chatterjee
Sir R. E. Holland
The Hon'ble Sir M. B. Dadabhoy
Sir G. Rainey
The Hon'ble Sir C. P. Ramaswami Ayyar Avarga.
Sir S. P. O'Donnell
Sir B. P. Standen
Sir Denys Bray
Sir H. N. Bolton
The Hon'ble Sir M. V. Joshi
Raja Sir Panaganti Ramarayaningar, Raja of Panagal
The Hon'ble Sir John Thompson
Sir Geoffrey deMontmorency
The Hon'ble Sir William Barton.
The Hon'ble Sir Frederick William Johnstone
The Hon'ble Sir Cawasji Jehangir (Junior)
H. H. the Maharaja of Chhatarpur
The Hon'ble Sir Grimwood Mears
The Hon'ble Sir Norman Edward Marjoribank
The Hon'ble Lieutenant Sir Muhammad Ahmedan Sa'id Khan of Chhatari, U.P.
The Hon'ble Sir Reginald Glancy
Sir Clement Hindly
Sir Fazli Hussain
Sir Thomas Middleton

Honorary Companions (C. I. E.)

H. E. Laurent Marie Emile Beauchamp
Dr. Jean Etienne Justin Schneider
Haji Mohammad Ali Rais-ut-Tujjar of Muhammerah
Sheik Abdulla Bin Esa, son of the Shaikh of Bahrein
Haidar Khan, Chief of Hayat Daud—*(Persian Gulf)*
Mirza Ali Karam Khan Shuja-i-Nizam, Dy. Governor of Bandar-Abbas
Commanding-Col. Ghana Bhikram
Lieut.-Col. Partab Jung Bahadur Rana
Major Alfred Paul Jacques Masson
Lieut.-Col. Gen. Sugiyama, Imperial Japanese Army
Lieut. Richard Beamish—*(Europe)*
Lieut. François Pierre Paul Razy—*(Europe)*
Lieut.-Col. Bhuban Bikram Rana—*(Nepal)*
Lieut.-Col. Shamshere Bikram Rana—*(Nepal)*
Lieut.-Col. Dumber Shumshere Thapa—*(Nepal)*
Lieut.-Col. Bhairab Shumshere Jung Bahadur Rana—*(Nepal)*
Lieut.-Col. Madan Man Singh Basniat—*(Nepal)*
Lieut.-Col. Gambhir Jung Thapa—*(Nepal)*
Lieut.-Col. Chandra Jung Thapa—*(Nepal)*
Major Uttam Bikram Rana—*(Nepal)*
Captain Narsing Bahadur Basniat—*(Nepal)*
H. E. Shikh Abdullah bin Qasim-al-Thani, Shaikh of Qatar—*(Persian Gulf)*

* Personal: hereditary title is Raja.

Taoyin Chur. Chu-jui-Ch'ih, Tao-yin of Kashgar
Sheikh Abdulla bin Jalowi, Amir of Hassa
Nobumiche Sakenobe
Major Masanosuke Tsunoda
His Excellency Muhammad Ibrahim Khan, Shaukat-ul-Mulk
His Excellency Shaikh Ahmad al Jabir, Shaikh of Koweit and dependencies
Khan Sahib Yusuf Bin Ahmed Kanoo, M.B.E. (*Persian Gulf*)
Guruji Hemraj (*Nepal*)
Mir Suba Austaman Singh (*Nepal*)
Bada Kazi Marichiman Singh (*Nepal*)

Companions (C. I. E.)

Stephen Paget Walter Vyvyan Luke
Charles Edward Pitman
George Felton Mathew
Thakur Bichu Singh
Sir George Watt, M.B.
Joseph Ralph Edward John Royle
Sir Frank Forbes Adam
Sir Rayner Childe Barker
Lieut.-Col. Charles Henry Ellison Adamson
Edmund Neel
Sir John Prescott Hewett
Sir J. Bampfylde Fuller
Sir William Turner Thiselton-Dyer
Major-Gen. G. F. L. Marshall
Edward Horace Man
Lieut.-Gen. Sir G. L. R. Richardson
Lieut.-Col. Sir Richard Carnac Temple
Edward C. S. George
Rao Bahadur Sri Ram Bhikaji Jatar
Fazulbhai Visram
Arthur C. Hankin
Adam G. Tytler
Charles E. Buckland
Harry A. Acworth
Col. C. A. Porteous
Sir Steyning W. Edgerley
Col. W. R. Yeilding
Hony. Col. Sir Henry J. Stanyon
Frederick John Johnstone
Col. Samuel Haslett Browne
Frank Henry Cook
Francis Erskine Dempster
Lieut.-Col. John Shakespear
Maharaj Rajashri Sankara Subbaiyar
Dr. Waldemar M. Haffkine
Rustamji Dhanjibhai Mehta
Khan Bahadur Mancherji Rustamji Dholu
Sir Benjamin Robertson
Sir Duncan James Macpherson
Sir Robert Warrand Carlyle
Henry Cecil Ferard
Charles George Palmer
Lieut.-Col. Samuel John Thomson
P. C. H. Snow
Lieut.-Col. A. B. Minchin
W. T. Van Someren
Charles Still
Col. H. K. McKay
Lieut.-Col. W. B. Browning
Madhava Rao, Vishwanath Patankar
Col. Walter Gawen King
Lieut.-Col. Sir Frank Popham Young
Lieut.-Col. Reginald Hawkins Greenstreet
Lieut.-Col. Malcolm John Meade
Edward Louis Cappell
George Moss Harriott
Henry Marsh
Lieut.-Col. Bertrand Evelyn Mellish Gurdon,
Henry Felix Hertz
Sir Courtenay Walter Bennett
Rear-Admiral Walter Somerville Goodridge
Col. Solomon Charles Frederick Peile
Col. John Crimmin
Lieut.-Col. Granville Henry Loch
Sir William Jameson Soulsby
Col. William John Read Rainsford
Lieut.-General Sir Thomas Edwin Scott
Lieut.-Col. Laurence Austine Waddell
Mir Ausaf Ali Khan General
Khan Bahadur Subadar-Major Sardar Khan
Hony. Capt. Subadar-Major Yasin Khan, Sardar Bahadur
Sidney Preston
Sir Murray Hammick
Alexander Lauzun Pendock Tucker
Lieut.-Col. John Clibborn
Col. George Wingate
Lieut.-Col. George Hart Desmond Gimlette
Arthur Henry Wallis
George Herbert Dacres Walker
Lieut-Col. Frank Cooke Webb Ware
Hony. Major Thomas Henry Hill
Alexander Porteous
Col. Thomas Elwood Lindsay Bate
Lockhart Mathew St. Clair
Rao Bahadur Sir Pandit Sakdeo Parshad
Sir Stuart Mitford Fraser
Lt.-Gen. Sir Ernest DeBrath
Walter Bernard deWinton
Algernon Elliott
Lt.-Col. Charles Arnold Kemball
Edward Giles
Lieut.-Col. Alfred William Alcock
Lieut.-Col. Douglas Donald
Dr. Sir Jagadish Chandra Bose
Raja Sir Sikandar Khan of Nagar
Sir William Dickson Cruickshank
Charles Henry Wilson
Robert Herriot Henderson
Charles Brown
George Huddleston
Lieut.-Col. Montagu William Douglas
Lieut.-Col. Arthur D'Arcy Gordon Bannerman
Robert Douglas Hare
William Bell
Sir Claude Hamilton Archer Hill
Edward Henry Scamander Clarke
Webster Boyle Gordon
Lieut.-Col. Robert Arthur Edward Benn
Madhu Sudhan Das
George James Perram
Sir C. Sankaran Nayar
William Ninnis Porter
Edward Waller Stoney
Walter Home
Lieut.-Col. C. W. Waddington
Khan Bahadur Barjorji Dorabji Patel
Lieut.-Col. Sir W. F. T. O'Connor
Lionel Truninger
Capt. George Wilson
William Harrison Moreland
Sir Montague de Pomeroy Webb
Sir Hugh William Orange
Lieut.-Col. Charles Archer
Major Lionel Maling Wynch
Major-General William Arthur Watson
Col. Alain Chartier de Lotbiniere Joly de Lotbiniere

Lieut.-Col. Aubrey John O'Brien
Herbert Cunningham Clogstoun
Sir Thomas Robert John Ward
Major-Genl. Sir Harry Davis Watson
Sir Derek William George Keppel
Commander Sir Charles Leopold Cust
Lt.-Col. Sir David Prain
Col. William John Daniell Dundee
The Hon'ble Sir Ibrahim Rahimtoola
Sir Edward Albert Gait
Robert Greig Kennedy
Col. Henry Thomas Pease
Col. Malcolm Sydenham Clarke Campbell
Maj.-Genl. Arthur Le Grand Jacob
Sir John Stratheden Campbell
Frederick Palmer
Surgn.-Lieut.-Col. Sir Warren Roland Crooke-Lawless
Lt.-Col. Alexander John Maunsell MacLaughlin
George Claudius Beresford Stirling
Francis St. George Manners-Smith
Col. David Melville Babington
Sir Pazhamarneri Sundaram Aiyar Sivaswami Aiyar
H. E. Field-Marshal Sir William Riddell Birdwood
William Herbert Dobbie
Lt.-Col. John Norman Macleod
Rear-Admiral George Hayley-Hewett
Ralph Buller Hughes-Buller
Lieut.-Col. Francis Frederic Perry
Diwan Bahadur Sir Daya Kishen Kau
Lieut.-Col. Stuart Hill Godfrey
Lieut.-Col. Sir Denys Brooke Blakeway
Maung Bah-Too
Brigadier-General Ernest William Stuart King Maconochy
William Ellis Jardine
Thomas Corby Wilson
Sir Frederick Loch Halliday
Percy Wyndham
Cecil Ward Chichele-Plowden
Lieut.-Col. Richmond Trevor Crichton
Albert Claude Verrieres
Muhammad Aziz-ud-din Khan
Nilambar Mukharji
Rai Bahadur Kali Prasanna Ghosh
John Newlands
Lieut.-Col. Henry Parkin
Col. Sir Robert Neil Campbell
H. E. Sir Montagu Sherard Dawes Butler
Lieut.-Col. Stuart George Knox
Edgar Thurston
Sir James Bennett Brunyate
Reginald Edward Enthoven
Henry Venn Cobb
Reginald Hugh Brereton
William Lochiel Berkeley Souter
Joseph John Mullaly
Sir Oswald Vivian Bosanquet
Dr. Sir John Hubert Marshall
Col. Frank Goodwin
Lieut.-Col. George Frederick Chenevix-Trench
Hony. Major Archibald Young Gibbs Campbell
James Adolpus Guider
Walter Culley Madge
Lieut.-Col. Wallace Christopher Ramsay Stratton
Hony. Lieut. James Scott
Lieut.-Col. Edward Gelson Gregson
Col. Benjamin William Marlow
Herbert Gerald Tomkins
Henry Whitby Smith
The Hon'ble Lieut.-Col. Francis Beville Prideaux
Lieut.-Col. Arthur Prescott Trevor
Lieut.-Col. Ramsay Frederick Clayton Gordon
Col. Charles Mactaggart
Hopetoun Gabriel Stokes
Lieut.-Col. Sir Leonard Rogers
Sir Henry Sharp
Mahamahopadhyaya Hara Prasad Shashtri
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Shams-ul-Ulama Jivanji Jamshedji Modi
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Sardar Pooran Singh, Sirdar Bahadur Maj.-Gen.
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Lieut.-Col. the Revd. W. T. Wright
Rai Bahadur Gyanendra Chandra Ghose
Rai Bahadur Sukhamaya Chaudhuri
Diwan Bahadur T. Rangachariyar
W. L. Travers
Sardar Bahadur Sardar Jawahir Singh
Captain Hissam-ud-Din Bahadur
Khan Bahadur Shah Nawaz Khan Bhutto
Rao Bahadur D. B. Raghubir Singh
Khan Bahadur K. Rustomji
Lieut-Col. R. P. Wilson
G. R. Thomas
H. Tireman
A. D. Ashdown
T. H. Morony
C. W. Lloyd Jones
H. A. Crouch
W. Gaskell
D. G. Harris
Lieutenant-Colonel C. A. Hingston
R. P. Hadow
Lieut.-Col. W. D. Smiles
J. M. Clay
Lieut.-Col. J. A. Brett
Major H. R. Lawrence
A. M. MacMillan
Khan Bahadur Qazi Azizuddin Ahmad
Oscar De Glanville
K. B. Nawabzada Saiyid Ashrafud Din Ahmad
K. B. Behramji Hormasji Nanavati
Surendra Nath Mullick
J. R. D. Glascott
Col. S. H. E. Nicholas
H. A. F. Lindsay
The Hon'ble Lieut.-Col. A. D. Macpherson
Kashinath Shriram Jatar
Rao Bahadur Vangal Thiruvenkata Krishnama Acharya Avargal
G. Wiles,
Sahibzada Abdul Majid Khan
E. R. Foy
B. A. Collins
R. R. Maconachie
P. Hawkins
J. Wilson-Johnston
C. M. King
H. W. Emerson
P. A. Kelly
Lieut.-Col. J. W. D. Megaw
B. S. Kisch
F. D. Ascoli
Major B. R. Reilly
H. S. Crosthwaite
Lieut.-Col. R. H. Bott
Jadu Nath Sarkar
P. Hide
F. W. Sudmersen
The Rev. A. E. Brown
Ramaswami Srinivasa Sarma.
E. H. Kealy
T. R. S. Venkatarama Sastrigal.
M. Irving
H. O. B. Shoubridge
Col. K. V. Kukday
S. W. Goode
A. H. W. Bentinck
H. L. L. Allanson
G. S. Bajpai
W. H. A. Webster
Rai Bahadur H. K. Raha
J. C. B. Drake
Lieut.-Col. T. W. Harley
G. Clarke
Major D. G. Sandeman
H. J. Bhabha
Sardar Mir M. A. Khan
Khwaja Nazim-ud-Din
A. C. Woolner
A. L. Covernton
P. S. Burrell
H. Denning
W. B. Brander
G. W. Hatch
C. U. Wills
H. A. Lane
K. S. Framji
Col. W. H. Evans
G. E. Fawcus

F. Armitage
T. C. Simpson
Lieut.-Col. A. C. Tancock
Brevet Lieut.-Col. H. L. Haughton
Lieut.-Col. H. D. Marshal
H. D. G. Law
R. W. Hanson
H. R. Wilkinson
Lieut.-Col J. W. Cornwall
R. D. Anstead
D. Milne
W. Roche
Rai Biswambhar Rai Bahadur
Rai T. P. Mukharji Bahadur
G. K. Devdhar
Chaudhari Chhaju Ram
H. H. The Maharaja of Bhutan.
J. H. R. Fraser,
Lt.-Col. J. C. H. Leicester
C. W. C. Carson
J. N. Gupta,
G. E. Soames,
H. C. Liddell
A. G. Edie
J. B. G. Smith
D. L. Drake-Brockman
D. M. Stewart
R. Littlehailes
J. A. Baker
Lt.-Col. R. W. Macdonald
C. S. Whitworth
A. B. Briggs
Lt.-Col. L. D.' E. Lenfestey
J. E. Armstrong
R. J. Hirst
F. P. V. Gompertz
Major A. G. Tresidder
Captain (Temp. Major) A. F. R. Lumby
P. L. Orde
Rai Bahadur Janak Singh
Diwan Bahadur T. K. Mehta
H. W. Nicholson
A. G. Clow, I.C.S.
W. D. R. Prentice, I.C.S.
A. H. Lloyd, I.C.S.
A. T. Stowell
H. C. Gowan, I.C.S.
Colonel C. C. Palmer
J. Hezlett, I.C.S.
G. T. Boag, I.C.S.
C. W. A. Turner, I.C.S.
Lt.-Col. C. L. Dunn, I.M.S.
A. R. Astbury
J. N. G. Johnson, I.C.S.
Major C. E. T. Erskine
R. O. Chamier
E. H. Berthoud, I.C.S.
R. A. Horton
W. H. Doshi
D. F. Mulla
G. Morgan
Rao Bahadur Raja Hari Singh of Mahajan
K. B. Chong
F. W. Thomas
Gurbar Shri V. M. Surag
G. G. Dey
J. G. Beazley
A. E. Gilliat
R. H. Beckett
T. B. Copeland
F. G. Arnould
C. S. C. Harrison
A. H. Mackenzie
G. A. Cocks
Col. C. P. Gunter
Prof. R. Coupland.
W. S. Hopkyns.
Lt.-Col. W. E. C. Bradfield
Lt.-Col. L. Cook
Lt.-Col. G. D. Franklin
Lt.-Col. ((Hony. Col.) R. R. Will
Lt.-Col. J. Cunningham
H. A. F. Metcalfe
V. K. A. Aravamudha Ayangar
S. D. Smith
G. E. C. Wakefield
Rai Bahadur B. D. Goenka
Dr. H. G. Roberts
Dr. J. A. Voelcker
The Hon. Lieut. Colonel H.S. Strong
G. Macworth Young
H. A. B. Vernon
J. N. Rpy
J. F. Dyer
William Mayes
Lieut. Colonel C.I. Brierley
J. M. D. Wrench
R. H. A. Delves
H. N. Gangulee
Lieut. Colonel W. G. Neale
Lieut. Colonel L. E. L. Burns
J. R. Dain, I.C.S.
F. H. Fearnley Whittingstall
Lieut. Colonel R. E. Wright
Lieut. Colonel H. H. Broome
E. F. Gunter
J. A. Madan, I.C.S.
F. W. H. Smith
R. S. Finlow
W. L. Scott
H. T. Holland
G. H. Stoker
D. G. Lal.

The Imperial Order of the Crown of India.

This Order was instituted Jan. 1, 1878 and for a like purpose with the simultaneously created Order of the Indian Empire. It consists of the Queen and Queen Mother with some Royal Princesses, and the female relatives of Indian Princes or of persons who have held conspicuous offices in connection with India. Badge, the Royal Cypher in jewels within an oval surmounted by an Heraldic Crown and attached to a bow of light blue watered ribbon, edged white. Designation, the letters C. I.

Sovereign of the Order.

THE KING-EMPEROR OF INDIA.

Ladies of the Order (C. I.)

Her Majesty The Queen
H. M. the Queen of Norway
H. R. H. the Princess Royal
H. R. H. the Princess Victoria
H. M. The Queen of Roumania
H. R. H. Princess Beatrice
The Ex-Duchess of Cumberland
H. R. H. The Princess of Hohenlohe-Langenburg
H. R. H. the Princess Louise (Duchess of Argyll)
H. I. & R. H. the Grand Duchess Ayril of Russia

Lady Patricia Ramsay
H. H. the Princess Marie-Louise
Baroness Kinloss
Lady Jane Emma Crichton
Dowager Countess of Lytton
Dowager Baroness Napier of Magdala
Dowager Marchioness of Dufferin and Ava
H. H. Maharani of Cooch-Behar
Marchioness of Lansdowne
Baroness Harris
Constance Mary Baroness Wenlock
H. H. Maharani Sahib Chimna Bai Gaekwar
H. H. Rani Sahib of Gondal
H. H. the Dowager Maharani of Mysore
Lady George Hamilton
H. H. the Maharani Sahiba of Udaipur
Alice, Baroness Northcote
Amelia Maria, Lady White
Mary Katherine, Lady Lockhar
Baroness Ampthill
The Lady Willingdon
Countess of Minto
Marchioness of Crewe
H. H. Begum of Bhopal
France Charlote, Lady Chelmsford
Countess of Reading
H. H. Maharani Sakhiya Raja Sahiba Scindia Alijah Bahadur of Gwalior
H. E. The Lady Irwin.

Distinctive Badges.—An announcement was made at the Coronation Durbar in 1911, that a distinctive badge should be granted to present holders and future recipients of the titles of 'Diwan Bahadur', 'Sardar Bahadur', 'Khan Bahadur', 'Rai Bahadur', 'Rao Bahadur', 'Khan Sahib', Rai Sahib' and 'Rao Sahib'. Subsequently the following regulations in respect of these decorations were issued:—(1) The decoration to be worn by the holders of the titles above mentioned shall be a badge or medallion bearing the King's effigy crowned and the name of the title, both to be executed on a plaque or shield surrounded by a five-pointed star surmounted by the Imperial Crown, the plaque or shield being of silver gilt for the titles of Diwan, Sardar, Khan, Rai and Rao Bahadur, and of silver for the titles of Khan, Rai, and Rao Sahib. (2) The badge shall be worn suspended round the neck by a ribbon of one inch and a half in width, which for the titles of Diwan and Sardar Bahadur shall be light blue with a dark blue border, for the titles of Khan, Rai and Rao Bahadur light red with a dark red border, and for the titles of Khan, Rai and Rao Sahib dark blue with light blue border.

A Press Note issued in November, 1914, states:—The Government of India have recently had under consideration the question of the position in which **miniatures** of Indian titles should be worn, and have decided that they should be worn on the left breast fastened by a brooch, and not suspended round the neck by a ribbon as prescribed in the case of the badge itself. When the miniatures are worn in conjunction with other decorations, they should be placed immediately after the Kaiser-i-Hind Medal.

Indian Distinguished Service Medal.—This medal was instituted on June 28th, 1907, by an Army Order published in Simla as a reward for both commissioned and non-commissioned officers of the regular and other forces in India. It bears on the obverse the bust of King Edward VII and on the reverse a laurel wreath encircling the words For Distinguished Service. The medal, 1⅜ inches in diameter, is ordered to be worn immediately to the right of all war medals suspended by a red ribbon 1¼ in. wide, with blue edges ⅜ in. wide. This medal may be conferred by the Viceroy of India.

Indian Order of Merit.—This reward of valour was instituted by the H. E. I. Co. in 1837, to reward personal bravery without any reference to length of service or good conduct. It is divided into three classes and is awarded to native officers and men for distinguished conduct in the field. On the advancement from one class to another the star is surrendered to the Government, and the superior class substituted, but in the event of the death of the recipient his relatives retain the decoration The order carries with it an increase of one-third in the pay of the recipient, and in the event of his death the allowance is continued to his widow for three years. The First Class consists of a star of eight points, 1⅜ in. in diameter, having in the centre a ground of dark blue enamel bearing crossed swords in gold, within a gold circle, and the inscription Reward of Valour, the whole being surmounted by two wreaths of laurel in gold. The Second Class star is of silver, with the wreaths of laurel in gold; and the Third Class entirely of silver. The decoration is suspended from a simple loop and bar from a dark-blue ribbon 1½ in. in width with red edges, bearing a gold or silver buckle according to class.

Order of British India.—This order was instituted at the same time as the Order of Merit, to reward native commissioned officers for long and faithful service in the Indian Army Since 1878, however, any person European or native, holding a commission in a native regiment, became eligible for admission to the Order without reference to creed or colour. The First Class consists of a gold eight-pointed radiated star 1½ in. in diameter. The centre is occupied by a lion statant gardant upon a ground of light-blue enamel, within a dark-blue band inscribed Order of British India, and encircled by two laurel wreaths of gold. A gold loop and ring are attached to the crown for suspension from a broad ornamental band $\frac{7}{10}$ in. in diameter, through which the ribbon, once blue, now red, is passed for suspension from the neck. The Second Class is $1\frac{7}{10}$ in. in diameter with dark-blue enamelled centre: there is no crown on this class, and the suspender is formed of an ornamental gold loop. The reverse is plain in both classes. The First Class carries with it the title Sirdar Bahadur, and an additional allowance of two rupees a day and the Second the title of Bahadur, and an extra allowance of one rupee per day.

Indian Meritorious Service Medal.—This was instituted on July 27th, 1888, and on receipt of the medal the order states "a non-commissioned officer must surrender his Long Service and Good Conduct medal": but on being promoted to a commission he may retain the M. S. medal, but the annuity attached to it will cease. On the obverse is the diademed

bust of Queen Victoria facing left, with a veil falling over the crown behind, encircled by the legend Victoria Kaisar-i-Hind. On the reverse is a wreath of lotus leaves enclosing a wreath of palm tied at the base, having a star beneath; between the two wreaths is the inscription for meritorious service Within the palm wreath is the word India. The medal, 1⅗ in. in diameter, is suspended from a scroll by means of a red ribbon 1¼ in. wide. The medals issued during the reigns of Queen Victoria's successors bear on the obverse their bust in profile with the legend altered to EDWARDVS or GEORGIVS.

THE KAISAR-I-HIND MEDAL.

This decoration was instituted in 1900, the preamble to the Royal Warrant—which was amended in 1901 and 1912—being as follows:—"Whereas We, taking into Our Royal consideration that there do not exist adequate means whereby We can reward important and useful services rendered to Us in Our Indian Empire in the advancement of the public interests of Our said Empire, and taking also into consideration the expediency of distinguishing such services by some mark of Our Royal favour: Now for the purpose of attaining an end so desirable as that of thus distinguishing such services aforesaid, We have instituted and created, and by these presents for Us, Our Heirs and Successors, do institute and create a new Decoration." The decoration is styled "The Kaisar-i-Hind Medal for Public Service in India" and consists of two classes. The Medal is an oval shaped Badge or Decoration—in gold for the First Class and in silver for the Second Class—with the Royal Cypher on one side and on the reverse the words "Kaisar-i-Hind for Public Service in India;" it is suspended on the left breast by a dark blue ribbon.

Recipients of the 1st Class.

Abdus Samad Khan of Rampur
Achariyar, Diwan Bahadur Tirumalai Desik
Achariyar, Diwan Bahadur V. Krishna Ayyangar Ramanuja
Advani, M. S.
Ahmad, Khan Bahadur Qazi Khalil-ud-Din
Aiyar, Mrs. Parvati Ammal Chandra Sekhara.
Alexander, A. L.
Allyn, Dr. (Miss) Jessie Matilda, M.D.
Aloysia, Rev. Mother Mary.
Amarchand, Rao Bahadur Ramnarayan
Ampthill, Margaret, Baroness
Anderson, The Rev. H.
Ashton, Albert Frederick
Ashton, Dr. R. J.
Ayyar, Dr. P. S. A. Chandrasekhara
Baird-Smith, J. R.
Balfour, Dr. Ida
Banerji, Sir P. C.
Bandorawalla, N. M.
Banks, Mrs. A. E.
Barber, Benjamin Russell
Barber, Rev. L.
Bare, Doctor Esther Gimson, M.D.
Barnes, Major Ernest
Barton, Mrs. Evelyn Agnes
Basu, Sir Kailas Chandra, Rai Bahadur
Beals, Dr., American Marathi Mission, Bombay
Bear, Mrs. Georgiana Mary
Beaty, Francis Montagu Algernon
Beck, Miss Emma Josephine
Bell, Lt.-Col. Charles Thornhill
Benson, Doctor (Miss) A. M.
Benson, Lady
Bentley, Dr. Charles Albert
Bertram, Rev. Father F.
Bestall, A. H.
Bhandari, Rai Bahadur Gopal Das
Bikanir, Maharaja of
Bingley, Major-General Alfred
Biwalkar, Sardar Parashram Krishnarao
Blanche Annie, Sister
Blowers, Commissioner Arthur Robert
Bonington, Max Carl Christian
Booth-Tucker, Frederick St. George de Lautour
Bosanquet, Oswald Vivian
Bose, Rai Bahadur Sir Bipin Krishna.
Bott, Captain R. H.
Brahmachari, Rao Bahadur U. N.
Bramley, Percy Brooke
Bray, Denys DeSaumarez
Brayne, Mrs.
Broadway, Alexander
Brown, Rev. A. E.
Brown, Dr. Miss E.
Brown, Rev. W. E. W.
Brunton, James Forest
Buchanan, Rev. John
Bull, Henry Martin
Burn, Richard
Burnett, General Sir Charles John
Caleb, Dr. C. C.
Calnan; Denis
Campbell, Colonel Sir Robert Neil
Campbell, Dr. Miss S.
Campion, John Montriou
Carleton, Dr. (Miss) Jessie, M.D.
Carleton, Marcus Bradford
Carlyle, Lady
Carmichael, Lady
Carter, Edward Clark
Castor, Lieut.-Col. R. H
Chand, Sakhi, Rai Bahadur
Chand, Rai Bahadur Lala Tara
Chapman, R. A. B.
Chatterton, The Rt. Rev. Eyre, D. D.
Chatterton, Alfred
Chatterton, Mrs. L.
Chaudhuri, Raja Sarat Chandra Rai
Chetty, Dewan Bahadur K. P. Puttanna
Chitnavis, Sir Shankar Madho
Chuts, Mrs.
Coldstream, William
Comley, Mrs. Alice
Commissariat, (Miss) Sherin Hormuzshaw
Copeland, Theodore Benfey
Coppel, Right Rev. Bishop Francis Stephens
Corbett, Capt. J. E. (Retd.)
Cousens, Henry
Cox, Arthur Frederick
Crawford, Francis Colomb
Crosthwaite, The Rev. C. A.
Crouch, H. N.
Currimbhoy, Mahomedbhoy

Dane, Lady
Darbhanga, Maharaja of
Darbyshire, Miss Ruth
Das, Ram Saran
Das, Sri Gadadhar Ramanuj
Das, Rai Bahadur Lala Mathra
Davies, Arthur
Davies, Rev. Can. A. W.
Davies, Mrs. Edwin
Davis, The Rev. C.
Davis, Miss Gertrude
Davys, Mrs.
Dawson, Brevet-Colonel Charles Hutton
Deane, Lieutenant-Colonel Herbert Edward
Debi, Ravi Murari Kumari
Devi, Maharani Parbaai
deLotbiniere, Lieutenant-Colonel Alain C. Joly
Devdhar, G. K.
Dewas (Junior Branch), Maharaja of
Dhar, Her Highness the Rani Sahiba Luxmibai, Pavar of
Dhingra, Dr. Behari Lal
Dobson, Mrs. Margaret
Douglas, Dr. E.
Drysdale, Rev. J. A.
DuBern, Amedee George
DuBern, Jules Emile
Dyson, Colonel Thomas Edwards
Earle, The Hon'ble Sir Archdale
Evans, The Rev. J. C.
Fargetson, Father A.
Farrer, Miss E. M.
Fatina Sidhika, Begum Saheba
Ferard, Mrs. Ida Margaret
Fosbrooke, Mrs. M. E. A.
Francis, Edward Belcham
Friedt-Moller, C. F.
Garu, Diwan Bahadur D. Seshagiri Rao Pantulu
Garu, Diwan Bahadur M. Ramachandra Rao Pantulu
Garu, Diwan Bahadur Raghupati Venkata-ratnam Nayudu
Ghosal, Mr. Jyotsnanath
Gillmore, The Rev. David Chandler
Glazebrook, N. S.
Glenn, Henry James Heamey
Gonzaga, Rev. Mother
Gordon, The Rev. D. R.
Goschen, Viscountess
Graham, Miss A. S.
Gregory, Brother
Graham, The Rev. John Anderson
Graham, Mrs. Kate
Grattan, Colonel Henry William
Griffin, Miss E.
Guilford, The Rev. E. (with Gold Bar)
Guyer, H. C.
Gwyther, Lieut.-Colonel Arthur
Hahn, The Rev. Ferdinand
Haig, Lieutenant-Colonel Patrick Balfour
Hall, Harold Fielding Patrick
Hamilton, Major Robert Edward Archibald
Hankin, E. H.
Hanson, The Rev. O.
Harper, Dr. R.
Hart, Dr. Louisa Helena
Harvest, Lieut.-Colonel Herbert de Vere
Harvey, Miss R.
Hatch, Miss Sarah Isabel
Hawker, Miss A. M.
Henrietta, Mother
Hey, Miss D. C. deLay
Hickinbotham, The Rev. J. H.
Higginbotham, S.
Hildesley, The Rev. Alfred Herbert
Hodgson, Edward Marsden
Hodgson, (Miss) F. A.
Hoeck, Rev. Father L. V.
Hogan, W. J. Alexander
Holmes, Major, J. A. H.
Holderness, Sir Thomas William
Holland, H. T.
Home, Walter
Hopkins, Mrs. Jessie
Hormusji, Dr. S. C.
Houlton, Dr. (Miss) Charlotte, M.D.
Howard, Mrs. Gabrielle Louise Caroline
Hoyland, John Somerwell
Hume, The Rev. R. A.
Husband, Major James
Hutchinson, Major William Gordon
Hutchinson, Sir Sydney Hutton Cooper
Hutchison, J.
Hutwa, The Maharani Jnan Manjari Kuari of
Hydari, Mrs. Amina
Irvine, Lieutenant-Colonel Thomas Walter
Ismail, Muhammad Yusaf
Ives, Harry William Maclean
Iyer, Diwan Bahadur C. S.
Jackson, Rev. James Chadwick
James, Lieutenant-Colonel Charles Henry
Jankibai
Jehangir, Mrs. Cowasji
Jenvier, Rev. C. A. R.
Jerwood, Miss H. D.
Josephine, Sister
Kamribai, Shri Rani Saheba, of Jasdan.
Kapur, Raja Ban Bihari
Kaye, G. R.
Kelly, The Rev. E. W.
Kerr, Mrs. Isabel
Khan, Khan Bahadur Kuli
Khan, Khan Bahadur Moghal Baz
King, Mrs. D.
Klopsch, Dr. Louis
Knox, Lady (Bar to Kaisar-i-Hind Gold Medal)
Kochamma, Sreemathi Vadasseri Ammaveedu
Ko, Taw Sein
Kothari, Sir Jehangir Hormusji
Kugelberg, Dr. C. F.
Lamb, The Hon'ble Sir Richard Amphlett
Lant, The Rev. W. E.
Lee, Mrs.
Lee Ah Yain
Lindsay, D'Arcy
Ling, Miss Catharine Frances
Loubiere, Rev. Father E. F. A.
Lovett, The Hon'ble Mr. Harrington Verney
Luck, Wilfred Henry
Lukis, Lady
Lyall, Frank Frederick
Lyons, Surgeon-General Robert William Steele
MacLean, Rev. J. H.
Macnaghten, Mr. F. M.
Macwatt, Major-General Robert Charles
Madhav Rao, Vishwanath Patankar
Mahant of Emar Math, Puri
Malegaon, Raje of
Malvi, Tribhuvandas Narottamdas
Maneckchand, Seth Motilal
Mann, Dr. Harold
Manners-Smith, The Hon'ble Mr. Francis St. George
Marie, Rev. Mother

Mary of St. Pauls, Rev. Mother
Matthews, Rev. Father.
Mayes, Herbert Frederick
McCarrison, Major Robert
McCloghry, Colonel James
Mcdougall, Miss E.
McKenzie, The Rev. J. R.
McNeel, The Rev. John
Mehta, Dr. D. H.
Mehta, Mrs Iravati.
Meiklejohn, Miss W. J.
Meston, Rev. W.
Millard, Walter Samuel
Miller, The Rev. William
Minto, Dowager, Countess of. C. I.
Moolgaokar, Dr. S. R.
Monahan, Mrs. Ida
Monahan, Mrs. Olive
Morrison, F. E.
Morgan, George
Muir, Rev. E.
Muir Mackenzie, Lady Therese
Mulye, V. Krishnarao
Nariman, Dr. Temulji Bhikaji
Narsinghgarh, Her Highness the Rani Shiv Kunwar Sahiba of
Neve, Dr. Arthur
Neve, Dr. Earnest
Newcomb, The Rev. J.
Nichols, The Rev. Dr. Charles Alvord
Nicholson, Sir Frederick Augustus
Nisbet, John
Noyce, William Florey
Oakley, Rev. E. S.
O'Byrne, Gerald John Evangelist
O'Donnell, Doctor J. P.
O'Donnel, Dr. Thomas Joseph
Oh, Maung Ba (*alias*) Ahmedullah
Oldham, Charles Evelyn Arbuthnot William
O'Meara, Major Eugene John
Padfield, The Rev. W. H. G.
Panna, Maharani of
Parakh, Dr. N. N.
Paranjpye, Dr. Raghunath Purshottam
Pears, S. D.
Pedley, Dr. Thomas Franklin
Pennell, Mrs. A. M.
Perfumi, The Rev. L. C.
Pettigara. Khan Bahadur Kavasji Jamshedji
Phelps, Edwin Ashby
Pickford, Alfred Donald
Piggot, Miss R.
Pitcher, Colonel Duncan George
Pittendrigh, Rev. G.
Plamonden, Rev. Mother S. C.
Plant, Captain William Charles Trew Gray Gambier
Platt, Dr. Kate
Posnett, Rev. C. W.
Poynder, Lieut.-Colonel John Leopold
Prasad, Lt.-Col. Kanta
Prasad, Pandit Sukhdeo
Price, John Dodds
Purer. Rev. W. C. B.
Ray, Rao Jogendra Narayan, Raja Bahadur
Reading, Countess of
Reed, Miss M.
Reid, Frederick David
Reid, R. N.
Reynolds, Leonard William
Richmond, Mr. Thomas
Rivington, The Rev. Canon, C. S.
Roberts. Dr. H. G.
Rose-Greenfield, (Miss)
Robson, Dr. Robert George
Rost, Lt.-Col. Ernest Reinhold
Row, Dr. Raghavendra
Roy, Babu Harendra Lal
Ruddle, Mrs. M. I.
Samthar, Maharaja of
Sanderson, Lady
Sarabhai Ambalal
Sawday, Rev. G. W.
Schofield, Miss M. T.
Schueren, Rev. Father T. T. Vander
Scott, Doctor A.
Scott, Mary H. Harriot
Scott, Rev. Dr. H. R.
Scott, Rev. W.
Scudder, Rev. Dr. Lewis Rousseau
Scudder, Miss Ida
Sell, The Rev. Canon Edward
Semple, Lieut.-Colonel Sir David
Sharp, Henry
Sharpe, Rev. E. D,
Sharpe, Walter Samuel
Sheard, E.
Shepherd, Rev. James
Sheppard, Mrs. Adeline B.
Sheppard, William Didsbury
Shillidy, The Rev. John
Shore, Lieut.-Colonel Robert
Shoubridge, Major Charles Albanlyrevis
Simon, The Rev. Mother
Singh, Munshi Ajit
Singh, Raja Bhagwan Bakhsh
Singh, Rai Hira
Sita Bai
Skinner, The Rev. Dr. William
Skrefsrud, The Rev. Larsorsen
Smith, Mrs. A. C.
Smith, Lieut.-Colonel Henry
Smith, S.
Solomon, Captain W. E.
Sorabji, Miss Cornelia
Southon, Major Charles Edward
Souza, Dr. A.
Spence, Christina Philippa Agnes
Spicer, Miss
Stait, Dr. Mrs.
St. Leger, William Douglas
St. Lucie. Reverend Mother
Stampe, William Leonard
Stanes, Robert
Starr, Mrs. L. A. (with bar)
Stephens, The Rev. F. C.
Stokes, Dr. William
Stratford, Miss L. M.
Surat Kuar, Rani Sahiba
Symons, Mrs. M. L.
Tabard, The Rev. Antoine Marie
Talati, Edalji Dorabji
Taylor, The Rev. George Pritchard
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Mary, Sister Eleanor
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Mathias, P. F.
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Naoum Abbo
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Narayan Singh, Rai Sahib
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Sahay, Lala Deonath
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Samuels, Joseph
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Sawhney, Lala-Isher Das
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Tha, Maung Shwe
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Theobald, Dr. Miss.
Thomas, Miss Frances Elizabeth
Thomas, Mrs. Mabel Fox
Thomas, Samuel Gilbert
Thomas, Major Williams.
Thompson, Mrs. Alice
Thompson, R. C.
Thomson, The Rev. G. Nicholas
Thoy, Herbert Dominick
Tilak, H. Vishwanath.
Timothy, Samuel
Todd, Capt.
Tomkins, Lionel Linton
Tonkinson, Mrs. Edith
Tudball, Miss Emma
Turner, Mrs. Vera
Udipi Rama Rao
Umar Khan, Malik Zorawar Khan
Vajifdar, Mrs. Hormusji Maneckji
Vale, Mrs. K.
Valentine, Capt. C. R.
Valpy, Miss K.
Varma, Babu Mahendra Deo
Vaughan-Stevens, Dudley Lewis
Vijayaraghava Acharyar
Vines, Thomas Humphrey
Visvesvaraya, Mokshagundam
Vurghese, Diwan Bahadur George Thomas
Wait, William Robert Hamilton
Wakefield, George Edward Campbell
Walayatullah, Khan Bahadur Hafiz Muhamma
Walewalker, P. Baburao
Waller, Frederick Chighton
Walters, Miss W. E.
Ward, Mr. W. A. P.
Warren, Miss Rosamund,
Wares, Donald Horne
Webb-Ware, Mrs. Dorothy
Weighell, Miss Anna Jane
Western, Miss Mary Priscilla
Weth, Mrs. Rosa
White, Miss J.
Wildman, Miss Elizabeth Annie
Wilkinson, Mrs. A.
Wilson, Francis Henry
Wilson, Miss Anna Margaret
Wilson, Mrs. E. R. B.
Wince, Miss Jane
Wiseman, Capt. Charles Sheriffe
Wiser, Mrs. C. V.
Woerner, Miss Lydia
Wood, The Rev. A.
Woodward, Dr. Miss Adelaide
Wright, Mrs. B.
Wylie, Miss Iris Eleanor
Wyness, Mrs. Ada
Yaw, Maung
Yerbury, Dr. J.
Young, Dr. M. Y.
Zahur-ul-Husain Muhammad,

THE VICTORIA CROSS.

The announcement, made at the Delhi Durbar in 1911, that in future Indians would be eligible for the Victoria Cross, gave satisfaction which was increased during the War and afterwards by the award of that decoration to the following :—

Subadar (then Sepoy) Khudadad Khan, 129th Baluchis.—On 31st October 1914, at Hollebeke, Belgium, the British Officer in charge of the detachment having been wounded, and the other gun put out of action by a shell, Sepoy Khudadad, though himself wounded, remained working his gun until all the other five men of the gun detachment had been killed.

Naick Darwan Sing Negi, 1-39th Garhwal Rifles.—For great gallantry on the night of the 23rd-24th November 1914 near Festubert, France, when the Regiment was engaged in retaking and clearing the enemy out of our trenches, and, although wounded in two places in the head, and also in the arm, being one of the first to push round each successive traverse, in the face of severe fire from bombs and rifles at the closest range.

Subadar (then Jamadar) Mir Dast, 55th Coke's Rifles.—For most conspicuous bravery and great ability at Ypres on 26th April 1915, when he led his platoon with great gallantry during the attack, and afterwards collected various parties of the Regiment (when no British Officers were left) and kept them under his command until the retirement was ordered. Jamadar Mir Dast subsequently on this day displayed remarkable courage in helping to carry eight British and Indian Officers into safety, whilst exposed to very heavy fire.

Rifleman Kulbir Thapa, 2-3rd Gurkha Rifles.—For most conspicuous bravery during operations against the German trenches south of Mauquissart. When himself wounded, on the 25th September 1915, he found a badly wounded soldier of the 2nd Leicestershire Regiment behind the first line German trench, and though urged by the British soldier to save himself, he remained with him all day and night. In the early morning of the 26th September, in misty weather, he brought him out through the German wire, and, leaving him in a place of comparative safety returned and brought in two wounded Gurkhas one after the other. He then went back in broad daylight for the British soldier and brought him in also, carrying him most of the way and being at most points under the enemy's fire.

Havildar (then Lance-Naick) Lala, 41st Dogras.—Finding a British Officer of another regiment lying close to the enemy he dragged him into a temporary shelter which he himself had made, and in which he had already bandaged four wounded men. After bandaging his wounds he heard calls from the Adjutant of his own Regiment who was lying in the open severely wounded. The enemy were not more than one hundred yards distant, and it seemed certain death to go out in that direction, but Lance-Naik Lala insisted on going out to his Adjutant, and offered to crawl back with him on his back at once. When this was not permitted, he stripped off his own clothing to keep the wounded officer warmer and stayed with him till just before dark when he returned to the shelter. After dark he carried the first wounded officer back to the main trenches, and then, returning with a stretcher carried back his Adjutant. He set a magnificent example of courage and devotion to his officers.

Sepoy Chatta Singh, 9th Bhopal Infantry.—For most conspicuous bravery and devotion to duty in leaving cover to assist his Commanding Officer who was lying wounded and helpless in the open. Sepoy Chatta Singh bound up the officer's wound and then dug cover for him with his entrenching tool, being exposed all the time to very heavy rifle fire. For five hours until nightfall he remained beside the wounded officer shielding him with his own body on the exposed side. He then under cover of darkness, went back for assistance and brought the officer into safety.

Naick Shahamad Khan, 89th Punjabis.—For most conspicuous bravery. He was in charge of a machine-gun section in an exposed position in front of and covering a gap in our new line within 150 yards of the enemy's entrenched position. He beat off three counter-attacks, and worked his gun single-handed after all his men, except two belt-fillers, had become casualties. For three hours he held the gap under very heavy fire while it was being made secure. When his gun was knocked out by hostile fire he and his two belt-fillers held their ground with rifles till ordered to withdraw. With three men sent to assist him he then brought back his gun, ammunition, and one severely wounded man unable to walk. Finally, he himself returned and removed all remaining arms and equipment except two shovels. But for his great gallantry and determination our line must have been penetrated by the enemy.

Lance-Dafedar Govind Singh, 28th Cavalry—For most conspicuous bravery and devotion to duty in thrice volunteering to carry messages between the regiment and brigade headquarters, a distance of 1½ miles over open ground which was under the observation and heavy fire of the enemy. He succeeded each time in delivering his message although on each occasion his horse was shot, and he was compelled to finish the journey on foot.

Rifleman Karan Bahadur Rana, 23rd Gurkha Rifles.—For conspicuous bravery and resource in action under adverse conditions, and utter contempt of danger during an attack. He with a few other men succeeded, under intense fire, in creeping forward with a Lewis gun in order to engage an enemy machine gun which had caused severe casualties to officers and other ranks who had attempted to put it out of action. No. 1 of the Lewis gun party opened fire and was shot immediately. Without a moment's hesitation Karan Bahadur pushed the dead man off the gun, and in spite of bombs thrown at him and heavy fire from both flanks, he opened fire and knocked out the enemy machine gun crew. Then switching his fire on the enemy bombers

and riflemen in front of him, he silenced their fire. He kept his gun in action, and showed the greatest coolness in removing defects which had twice prevented the gun from firing. He did magnificent work during the remainder of the day and when a withdrawal was ordered assisted with covering fire until the enemy was close to him. He displayed throughout a very high standard of valour and devotion to duty.

Ressaldar Badlu Singh, 14th Lancers attached 29th Lancers.—For most conspicuous bravery and self-sacrifice on the morning of the 23rd September 1918, when his squadron charged a strong enemy position on the west bank of the River Jordan, between the river and Kh. es Samariveh Village. On nearing the position Ressaldar Badlu Singh realised that the squadron was suffering casualties from a small hill on the left front occupied by machine guns and 200 infantry. Without the slightest hesitation he collected six other ranks and with the greatest dash and an entire disregard of danger charged and captured the position, thereby saving very heavy casualties to the squadron. He was mortally wounded on the very top of the hill when capturing one of the machine guns single-handed, but all the machine guns and infantry had surrendered to him before he died. His valour and initiative were of the highest order.

Rifleman Gobar Sing Negi, 2nd Battalion, 39th Garhwal Rifles.—For most conspicuous bravery on 10th March 1915 at Neuve Chapelle. During an attack on the German position he was one of a bayonet party with bombs who entered their main trench, and was the first man to go round each traverse, driving back the enemy until they were eventually forced to surrender. He was killed during this engagement.

Sepoy Ishaw Singh, 28th Punjabis.—For devotion and bravery "quite beyond all praise" in Waziristan on 10th April, 1921. He received a severe gunshot wound in the chest while serving a Lewis gun, and when all the havildars had been killed or disabled he struggled to his feet, called to his assistance two men, and charged and recovered the gun, restoring it to action. He refused medical attention, insisting first on pointing out where the other wounded were and on carrying water to them. While the medical man was attending to these wounded he shielded him with his body and he submitted to medical attention himself only after he was exhausted through three hours' continual effort and by loss of blood.

PASSPORT REGULATIONS.

A.—British Subjects.

1. British Indian passports are issued only to :—(1) British subjects by birth, (2) wives and widows of such persons, (3) British subjects by naturalization and (4) British-protected persons.

2. The Indian Passport Regulations do not require persons to be in possession of passports for leaving India, but as practically every other country requires travellers to be in possession of passports before they are allowed to land at the port of such country, travellers are advised to obtain passports before embarkation. Members of His Majesty's Naval, Military or Air Forces or of the Indian Marine Service travelling on duty and members of the families of such persons when travelling to the United Kingdom on military entitled passages need not have passports.

3. Passports are not required for journeys by sea from Bombay to ports in India or to Burma or Ceylon ; nor do natives of India travelling to the Federated Malay States or the Strait Settlements require passports unless they propose to continue their journey onward.

4. In order to obtain a passport, an application form (showing, among other things, the reasons for the proposed journey) should be filled in by the applicant and the applicant's declaration certified by a Political Officer, Magistrate, Justice of the Peace, Police Officer not below the rank of Superintendent, or Notary Public resident in India. Copies of the form can be obtained from any District Magistrate, from the Commissioner of Police, Bombay, by post from the Passport Officer to the Government of Bombay, by personal application at the Passport Office, or from any of the leading Banking and Shipping Agents in Bombay. Small duplicate unmounted copies of the photograph of the applicant and a fee of Rs. 3 should be forwarded with the application form. Fees are not accepted in stamps or by cheque.

5. The application form when filled in should either be posted with the photographs and fee to the Passport Officer to the Government of Bombay, or should be presented at the Passport Office, Bombay.

6. The Passport Office in Bombay is situated in the Civil Secretariat. The office is open from 11 a.m. to 4 p.m. daily, except on Saturdays when it closes at 1 p.m. and on Sundays and public holidays.

7. As a passport is valid for five years, there is no objection to anyone applying for a passport weeks or even months in advance of the date of sailing and much inconvenience will be avoided by early application. A notice of at least four days should be given for the preparation of a new passport and at least two days for an endorsement, renewal or visa. The Passport Officer cannot issue passports outside office hours and as the preprations of a passport takes time, applicants who postpone application to the last moment do so at their risk.

Iraq.

8. Members of His Majesty's Naval, Military or Air Forces or of the Indian Marine Service in uniform and *bona fide* Muhammadan pilgrims (Haj or Zair) holding individual pilgrim passes (do not require passports for their journey to Iraq. All other travellers must be in possession of national passports and visas for Iraq. In the absence of Iraq Consular Officers in India, visas for Iraq are granted by Passport Issuing Authorities in India on behalf of the

Iraq Government subject to the conditions stated below. The Iraq visas are of two kinds—Ordinary, valid for all entries into Iraq during a period of twelve months; and Transit, valid for a single journey only, allowing for stay of not more than fifteen days in Iraq, The fee for these visas is the same as for British visas—*vide* paragraph 17 below. Iraq national passports are valid for return to that country without any further visa or endorsement.

Except in the case of *bona fide* tourists, business representatives and employees of well established firms and persons with definite guarantee of employment in Iraq, visas for Iraq will not be granted without the previous permission of the Iraq Government. The Passport Offices will on request, ask for this permission by post or, if the applicant is prepared to defray the cost by cable. Applicants must state clearly the nature of their business and give one or more references in Iraq to enable the local authorities to make inquiries regardig the purpose of their journey.

With the exception of tourists who may remain for three months in Iraq without registratiom, all persons are required to obtain a "permis de sejour" from the police within fifteen days of their arrival in Iraq. Travellers are also warned that before departure from Iraq even on a transit visa they must obtain a passport endorsement of departure.

Egypt.

9. In the absence of Egyptian Consular Officers in India visas for Egypt are granted by Passport Issuing Authorities in India on behalf of the Egyptian Government. The fee for these visas is the same as for British visas—*vide* paragraph 17 below. Applicants for non-transit visas for Egypt should be able to produce evidence to show that they are in possession of ample and independent means or are the agents of houses of business of good standing or have secured permanent employment in Egypt. In all other cases the previous permission of the Ministry of Foreign Affairs in Egypt is necessary for the visit. Holders of the new-form Egyptian passports do not require visas to return to Egypt.

10. Restrictions also exist on travel to various parts of the British Empire, and to certain foreign countries. Among these may be mentioned Australia, Canada, Mexico, Mahommerah and Abadan, New Zealand, Palestine, Southern Rhodesia, Union of South Africa, South West Africa and the United States of America. The restrictions apply particularly to Indians. Detailed particulars with respect to each country will be supplied on application.

Foreign Countries.

11 Passports for journeys to or through foreign countries require, after issue, the visa of the Consul concerned. The addresses of the foreign consulates in Bombay will be found in the appendix below. Visas are, however, not necessary for Austria, Belgium, Denmark, France, Germany, Holland, Iceland, Italy, Liechtenstein, Luxemberg, Norway, Portugal, Sarro, Spain, Sweden and Switzerland, provided the names of these countries are entered on the passport by a British Passport-issuing authority.

Renewal.

12. A passport is valid for five years from the date of issue and is renewable for a further period of from one to five years at the option of the holder; but in no case can a passport be extended beyond ten years from the original date of issue. On expiration of this period, or, if at any time the space provided for visas is covered and the holder wishes to travel to countries for which fresh visas are required a new passport must be obtained. Application for renewal must be made in the prescribed form, copies of which may be had from any of the officers mentioned in paragraph 4 above. The fee for renewals is Re. 1 for each year, or portion of a year, for which the passport is renewed.

Endorsements

13. A passport is valid only for the country or countries endorsed on it and fresh endorsements from a British Passport authority are not needed during the validity of the passport for subsequent journeys to these countries. Fresh endorsements may, however, be obtained on the passport for additional countries. Passports endorsed as valid for the British Empire are also available for travelling to territories under British protection or mandate, not however including Palestine and Iraq, for which countries the passport must be specifically endorsed.

Marriage.

14. A lady on marriage or re-marriage requires a fresh passport.

15. In the case of a joint passport issued in favour of a husband and wife, the latter cannot travel alone on it, but should take out a fresh passport, surrendering the joint passport for cancellation of her name from it.

B.—Foreigners.

16. Foreigners proceeding direct to their own country, or to, or through, any other foreign country or countries do not require a British visa on their passports. The nationals of the following countries do not require a British visa for travelling to the United Kingdom. The concession also applies to certain nationals proceeding to certain British Dominions and Colonies and information on this point can be obtained from the Passport Officer. The concession does not apply to India.

Austria, Belgium, Denmark, France, Germany, Holland, Iceland, Italy, Liechtenstein, Luxemburg, Norway, Portugal, Sarro, Spain, Sweden and Switzerland.

17. Foreigners who are subjects of the countries shown in the appendix below and who are travelling to British territories for which a British visa is necessary should first obtain passports from their consular representatives and should then present them to the Passport Officer for visa, together with a written statement of the reasons for the journey. British visas are of two kinds, *viz.*, the Non-transit and Transit. The fees for these are Rs. 5-8-0 and Re. 0-9-0, respectively, except in the case of nationals of state which levy higher fees, when the retaliatory scale of fees will be applied.

18. Other foreigners should apply for Identity certificates through the Commissioner of Police, Bombay, or, where such foreigners reside in the mofussil, through the District Magistrate of the district in which they are residing. Small duplicate copies of the applicant's photograph should accompany the application. The fee for an Identity Certificate is Rs. 1-8-0.

19. The holder of a foreign passport who has obtained a visa granted by a British Passport Authority outside India for a destination which involves landing in, or passing through, India does not need a further visa from the authorities in India.

20. Copies of this notice can be had free of charge on application.

ADDRESSES OF FOREIGN CONSULATES IN BOMBAY.

Afghanistan.—Amir's Bungalow, Walkeshwar Road, Malabar Hill.
Austria.—C/o E. Stella and Co., Taj Building, Wallace Street, Fort.
Belgium.—Central Bank Building, Medows Street, Fort.
Brazil.—Asian Building, Nicol Road, Ballard Estate.
Cuba.—Jer Mahal, Dhobi Talao.
Czecho-Slovakia.—18, Rampart Row, Fort.
Denmark.—C/o Shaw Wallace and Company, Wittet Road, Ballard Estate.
Finland.—Alice Building, Hornby Road, Fort.
France.—17 Cuffe Parade, Colaba.
Germany.—Narandas Building, Sprott Road, Ballard Estate.
Italy.—Asian Building, Nicol Road, Ballard Estate.
Japan.—Sukhadwala Building, 192, Hornby Road, Fort.
Netherlands.—Exchange Buidings, Sprott Road, Ballard Estate.
Nicaragua.—Alice Building, Hornby Road, Fort.
Norway.—Alice Building, Hornby Road, Fort.
Persia.—"Seaside," 147, Sassoon Dock Road, Middle Colaba.
Portugal.—21, Cuffe Parade, Colaba.
Siam.—C/o Wallace and Company, Wallace Street, Fort.
Spain.—Morarji Gokuldas Cloth Market, Kalbadevi Road.
Sweden.—Volkart Building, Graham Road, Ballard Estate.
Switzerland.—Volkart Building, Graham Road, Ballard Estate.
United States of America.—Jehangir Wadia Building, Esplanade Road, Fort.

States having Consulates in Calcutta and Simla but not in Bombay.

Argentine Republic :—5, Fairlie Place, Calcutta.
Bolivia.—27, Park Road, Calcutta.
Chiel.—17, Stephen's Court, Park Street, Calcutta.
Costa Rica.—10, Prasunno Kumar, Tagore Street, Calcutta.
Greece.—7, Mission Row, Calcutta.
Guatemala.—19, Prasunno Kumar, Tagore Street, Calcutta.
Mexico.—6, Rose Villa, Simla.
Panama.—12, Gaulstan Mansions, Calcutta.
Peru.—11-2, Lansdowne Road, Calcutta.
Russia.—Esplanade Mansions, Calcutta.
Salvador.—10, Prasunno Kumar, Tagore Street, Calcutta
Venezuela :—Tagore House, 27, Park Lane, Calcutta.

The School of Oriental Studies.

This School was established by Royal Charter in June 1916. The purposes of the School (as set out in the Charter) are to be a School of Oriental Studies in the University of London to give instruction in the Languages of Eastern and African peoples, Ancient and Modern, and in the Literature, History, Religion, and Customs of those peoples, especially with a view to the needs of persons about to proceed to the East or to Africa for the pursuit of study and research, commerce or a profession, and to do all or any of such other things as the Governing Body of the School consider conducive or incidental thereto, having regard to the provision for those purposes which already exists elsewhere and in particular to the co-ordination of the work of the School with that of similar institutions both in Great Britain and in its Eastern and African Dominions and with the work of the University of London and its other Schools.

The School possesses noble and adequate buildings, in Finsbury Circus, provided by the British Government under the London Institution (Transfer) Act of 1912. The sum of £25,000 required for the alteration and extension of the buildings of the London Institution for the purposes of the School was voted by Parliament. The School buildings are quiet, although they are in the heart of the City. The School provides teaching in more than sixty subjects In a considerable proportion of the spoken languages instruction is given by teachers belonging to the countries where the languages are spoken, as it is the aim of the School to provide as far as possible both European and

Oriental Lecturers in the principal languages included in the curriculum.

Courses on the History, Religions, and Customs of Oriental and African countries form a special feature in the teaching of the School. There is now a whole time lecturer in Phonetics, the classes for which are numerically larger than in any other subject. It is intended to record fully in phonetic symbols all the languages taught at the School.

Courses are also provided in Indian Law and the History of India, and arrangements are made from time to time for special courses of lectures to be given by distinguished orientalists not on the staff. Various Scholarships are given.

Patron, H. M. the King. *Chairman of the Governing Body,* Sir Harry L. Stephen, LL.M. *Director,* Professor Sir E. Denison Ross, C.I.E. PH.D.

Teaching Staff.

	Name.	*Subjects.*	*Status.*
1.	Sir Thomas W. Arnold, C.I.E., M.A., D. LITT., F.B.A. Ph. D.	Arabic (Classical)	Professor.
2.	T. Grahame Bailey, M.A., B.D., LITT. D.	Hindustani (Urdu & Hindi)	Reader.
3.	L. D. Barnett, M.A., LITT.D.	Indian History and Sanskrit	Lecturer.
2.	C. O. Blagden, M.A., D. LITT.	Malay	Reader.
4.	J. Percy Bruce, M. A., D. LIT.	Chinese	Professor.
	G. H. Darab Khan	Persian	Lecturer.
3.	Caroline A. F. Rhys Davids, M.A., D. LIT.	Pali	,,
3.	W. Doderet, M.A., I.C.S. (retired)	Gujarati	,,
5.	H. H. Dodwell, M.A.	History	Professor
	Sheikh Kadhim Dojaily	Arabic (Mesopotamian)	Lecturer.
	E. Dora Edwards, M.A.	Chinese (Mandarin)	,,
3.	H. A. R. Gibb, M.A.	Arabic (Classical)	,,
	J. Withers Gill, O.B.E.	Hausa	,,
3.	Sir Wolseley Haig, K.C.I.E., C.S.I., C.M.G. C.B.E., M.A.	Persian	,,
	W. A. Hertz, C.S.I.	Burmese	,,
	G. E. Iles, O.B.E., M.A.	Arabic	,,
	Commander N. E. Isemonger, R.N. (retired)	Japanese	,,
	Sheikh H. Abdel Kader	Arabic (Egyptian)	,,
	S. G. Kanhere	Marathi and Sanskrit	,,
	G. E. Leeson	Hindustani (Urdu & Hindi)	,,
3.	A. Lloyd-James, M.A.	Phonetics	,,
3.	Count Leon Ostrorog, LL.D.	Ottoman Law	Hon. Lecturer
2.	W. Sutton Page, O.B.E., B.A., B.D.	Bengali	Reader.
3.	T. G. F. Palmer	Hindustani	Lecturer.
	Ali Riza Bey	Turkish	,,
7.	Sir E. Denison Ross, C.I.E., PH.D.	Persian	Professor.
3.	A. Sabonadiere, I.C.S. (retired)	Indian Law	Lecturer.
	C. C. Shu	Mandarin and Chinese Classics	,,
	W. Stede, Ph. D.	Pali and Sanskrit	,,
	G. J. F. Tomlinson C.B.E. M.A.,	Hausa	,,
	S. Topalian	Armenian and Turkish	,,
8.	R. L. Turner, M.C., M.A.	Sanskrit	Professor.
6.	I. Wartski, B.A.	Modern Hebrew	Lecturer.
9.	Alice Werner, D.LIT. LL.A.	Swahili & other Bantu languages.	Formerly Professor,
	Mary Werner	Swahili	Lecturer.
3.	M. de Z. Wickremasinghe, M.A.	Tamil and Telugu	Reader.
	Do.	Sinhalese and Malayalam	Lecturer.
	S. Yoshitake	Japanese	,,

8. University Professor of Arabic and Appointed Teacher.
2. University Reader and Appointed Teacher.
3. Recognised Teacher in the University of London.
4. University Professor of Chinese and Appointed Teacher.
5. University Professor of the History and Culture of British Dominions in Asia, with special reference to India and Appointed Teacher.
6. Ahad Ha'am Lectureship in Modern Hebrew.
7. University Professor of Persian and Appointed Teacher. (Director).
9. University Professor of Sanskrit and Appointed Teacher.
1 University Professor of Swahili and other Bantu languages and Appointed Teacher.

The Fisheries of India.

The fisheries of India, potentially rich, as yet yield a mere fraction of what they could were they exploited in a fashion comparable with those of Europe, North America or Japan. The fishing industry, particularly the marine section, has certainly expanded considerably within the last 50 years concurrently with improvement in the methods of transport and increase in demand for fish, cured as well as fresh, from the growing populations of the great cities within reach of the seaboard. The caste system, however, exerts a blighting influence on progress; fishing and the fish trade are universally relegated to low caste men who alike from their want of education, the isolation caused by their work and caste, and their extreme conservatism, are among the most ignorant, suspicious and prejudiced of the population, extremely averse from amending the methods of their forefathers and almost universally without the financial resources requisite to the adoption of new methods, even when convinced of their value. Higher caste capitalists have hitherto fought shy of association with the low caste fishermen, and, except in the case of joint stock companies to engage in large operations on new lines, these capitalists cannot be counted upon to assist in the development of Indian fisheries. As in Japan, it appears that the general conditions of the industry are such that the initiative must necessarily be taken by Government in the uplift and education of the fishing community and in the introduction and testing of new and improved apparatus and methods.

The first local Government to lead the way was that of Madras, which in 1905 initiated an investigation of the industry, both marine and fresh-water, appointing Sir F. A. Nicholson to supervise operations. Bengal followed suit in 1906, and from these beginnings have sprung the local Fisheries Departments of Madras, Bengal and Behar and Orissa. Bombay, the remaining seaboard province, has comparatively small fresh-water interests compared with Madras and Bengal, and as it happens that her marine fisheries are favoured with good harbours and the most enterprising race of sea-fishermen in India, there was less urgent need for State help in the industry. Fisheries there were a subject of Government solicitude for five years after the war but they finally ceased to receive any attention after the abolition in 1924 of the short lived Department of Industries to which this subject was allotted.

Madras.

The Madras coast line of 1,750 miles is margined by a shallow-water area within the 100 fathom line of 40,000 sq. miles; outside of a mere fringe inshore, this vast expanse of fish-surf-swept East Coast is singularly deficient in harbours whereon fishing fleets can be based, and so from Ganjam to Negapatam, the unsinkable catamaran, composed of logs tied side by side, is the only possible seagoing fishing craft. Its limitations circumscribe the fishing power of its owners and consequently these men are poor, and the produce of their best efforts meagre compared with what it would be if better and larger boats were available and possible. The West coast is more favoured. From September till April weather conditions are good enough to permit even dugout canoes to fish daily. The people of this coast are found of fish and no difficulty is found in beaching canoes and boats throughout this season. The fishing population is a large one. The 1921 census gave 66,684 adults as subsisting on fishing industries in Malabar and South Kanara, a small number after all considering the immense wealth of these seas. The chief fishes are sardines, mackerel, catfishes and jewfishes (kora or gol): the two first overshadow all others. So greatly in excess of food requirements are the catches of sardines that every year large quantities are turned into oil and manure. Fishing outside the 5 fathom line is little in evidence save by Bombay boats (Ratnagiri) which are engaged in drift netting for bonito, seer and other medium-sized fishes. These strangers are enterprising fishers and bring large catches into Malpe and Mangalore and other convenient centres; the material is largely cured export.

Fish Curing.—Fish curing is practised extensively everywhere on the Madras coasts: its present success is due primarily to Dr. Francis Day who, after an investigation during 1869-71 of the fisheries of the whole of India, pressed for the grant to fishermen of duty-free salt for curing purposes within fenced enclosures. He advocated much else, but the time was not ripe and the salt concession was the sole tangible result of his long and honourable efforts. His salt suggestions were accepted by the Madras Government, and from 1882 a gradually increassing number of yards or bounded enclosures were opened at which salt is issued free of duty and often at rates below the local cost of the salt to Government. At present about 110 of such yards are scattered along the coast and over 55,000 tons of wet fish are annually cured therein. The total receipts on the administration of these yards for the year 1927-28 was Rs. 4,40,393 and expenditure Rs. 4,36,500. The credit balance on the year's working was therefore Rs. 3,893.

Pearl and Chank Fisheries.—There were two pearl fisheries held during the year, being the last of a series of fisheries held at Tuticorin since 1926. Though both were held in a small scale, they covered over the longest pearl-fishery period in a single fishery year, *viz.*, 97 fishing days and brought in a net revenue of Rs. 3,38,930-10-11 the highest on record, since the pearl fishery came under the British Rule the next in rank being in 1806-1807, *viz.*, Rs. 3,14,454. The total number of oysters fished amounted to nearly a crore. A cursory examination of the banks this year so far as weather permitted reveals that the oysters still remaining in the beds might not survive long and there is little prospect of another fishery during the next year.

Though the best season (February and March) could not be fully utilised for chank fishery, as is usually the case when pearl fishery occurs, chank fisheries were conducted both at the Ramnad Dt. as well as Tuticorin in the intervals between the Pearl Fisheries yielding a net revenue of Rs. 31,775.

The Inland Fisheries.—The Inland Fisheries of Madras compare unfavourably with those of Bengal. Many of the rivers dry up in the hot season and few of the many thousands of irrigation tanks throughout the province hold water for more than 6 to 9 months. As a consequence inland fisheries are badly organized and few men devote themselves to fishing as their sole, or even main, occupation. The custom is to neglect or ignore the fishery value of these streams and tanks so long as they are full of water: only when the streams shrink to pools and the tanks to puddles do the owners or lessees of the fishing rights turn out to catch fish. The result is a dearth of fish throughout the greater part of the year, a glut for a few days, and often much waste in consequence. The chief fresh-water fishes of economic importance are the murrel, notable for its virtue of living for considerable period out of water, various carps, and catfishes, the hilsa (in East Coast Rivers only), and the catla. In the Nilgiris, the rainbow trout has been acclimatised and thrives well. The Government working in conjunction with the Nilgiri Game Association maintain a hatchery at Avalanche, where quantities of fry are hatched and reared for the replenishment of the streams of the plateau.

The Madras Department of Fisheries.—As Government attention has been given in Madras over a longer period to the improvement of fisheries, and a larger staff concentrated upon the problems involved than elsewhere, this Presidency has now the proud position of knowing that her fisheries and collateral industries are better organized and more progressive than those in other provinces. The credit for the wonderful success which has been achieved and the still greater promise of the future, is due in large measure to the wise and cautious plans of Sir F. A. Nicholson, who from 1905 to 1918 had the guidance of affairs entrusted to him. In 1905 he was appointed on special duty to investigate existing conditions and future potentialities; in 1907, a permanent status was given by the creation of a fisheries bureau and this in turn has developed into a separate Department of Government which till August 1923 was being administered by Mr. James Hornell, F.L.S., as Director, and is now controlled by his successor Dr. B. Sundara Raj, M.A., Ph. D. The Higher staff consists of a Superintendent of Pearl and Chank Fisheries, and three Assistant Directors. These are respectively in charge of (*a*) the departmental fisheries (pearling, chanks, beche-de-mer, etc.); (*b*) the co-operative and socio-economic side of the Department's operations; (*c*) inland pisciculture; (*d*) deep-sea fishing and salt-transport. Other officers have charged respectively of sections dealing with education and industrial work, which include a Training Institute for village teachers, fish-curing yards, and oil and guano factories. All the public fish curing yards till now under the control of the Salt and Abkari Department have passed into the charge of the Fisheries Department. It is now possible to introduce the better methods of cure and improved hygiene which the Department has been straining to popularise, in all the yards. Due to the transfer of the yards the Fisheries Department has a large ramified staff of yard officers (Salt Sub-Inspectors, Petty Yard Officers and peons) in almost every large fishing village on the coast. Besides the direct work of issuing salt for curing, the Department will now set itself to train these officers into expert advisers in curing methods and marketing fish, social workers for the inculcation of thrift, co-operative and progressive ideas and new industries and lastly as trained observers for recording and reporting on various biological questions connected with fish and fisheries and collecting statistics regarding the value and quantity of sea fish caught and landed.

The activities of the Department are so varied and far-reaching that it is difficult even to enumerate them in the space available much less to give details. So far its most notable industrial successes have been the reform of manufacturing processes in the fish-oil trade the creation of a fishguano industry, and the opening of an oyster farm conducted under hygienic conditions (For details see the Bulletins of the Department issued from the Government Press, Madras) Twenty-two volumes have been issued to date and the twenty-third volume is in press. All this work has been carried on under serious handicap for want of suitable accommodation for the research staff.

Marine Aquarium.—Perhaps a word is necessary about this institution at Madras. The building was constructed under the auspices of the Superintendent, Government Museum, Madras, and was thrown open to the public on 21st October 1909. The Superintendent, Government Museum, had charge of the Aquarium for ten years till 1919 when it was transferred to the Department of Fisheries.

Ever since its opening, being the first of its kind in Asia, it has been immensely popular with the public. The number of visitors during the year was 1,04,401. Two rates of admissions are charged, *viz.*, one anna and four annas. The fatter rate is charged on Fridays for the benefit of those who would like to see the Aquarium under less-crowded conditions. The net profit realized last year was Rs. 3,111-7-7

Fishing rights in the large irrigation tanks were transferred from Government to local authorities many years ago; these tanks are now being reacquired by Government in order that they may be stocked periodically by the Department; the results so far have shown a profit on the operations. To breed the necessary fry, three fish farms are in operation, and the construction of three more is in progress. In these the chief fish bred are the Gourami, obtained from Java, the Murrel and Etroplus suratensis, which has the excellent attribute of thriving and breeding as well in brackish as in fresh water; all three protect their eggs while developing, a useful habit; both the Gouram and Etroplus are largely vegetarian in diet. A further activity is represented by the breeding of small fishes specially addicted to feed upon the aquatic larvae of mosquitoes. These are supplied in thousands to municipalities and other local authorities at a nominal price, for introduction into mosquito-haunted sheets of water; these anti-malarial operations have proved most successful in these places where the local authorities have given proper attention to the direction given. The educational work of the Department is becoming one of its most

important branches whether it be specially training teachers for schools in fishing villages or training men in the technology of curing, canning and oil manufacture; in co-operative propaganda and in the supply of zoological specimens for the use of college classes and museums. The last named has filled a long-felt want and is contributing materially to the advancement of the study of zoology throughout India; there is now no need to obtain specimens from Europe.

Deep Sea Fishing and Research.—The Trawler *Lady Goschen* purchased in 1926 for conducting deep sea fishing experiments and research, economic salt transport and other requirements of the department, in spite of various difficulties as regards equipment and crew, was able to accomplish a considerable amount of preliminary work before the monsoon set in. She did half a dozen cruises off Madras, and a couple of trawls off Calicut, before she was engaged in a detailed survey of the fishing banks, and an exploration of the trawling grounds from off Tuticorin to Cape Comorin in the South. The sea bottom off Madras was found rocky in the places explored causing damages to net. Further trawling experiments will have to be conducted in this area to determine whether suitable trawling grounds exist anywhere in the neighbourhood.

The fishing experiments off the Cape Comorin plateau were confined to an area between 20 fathoms and 100 fathoms line. 60 hauls were made in this area in 31 days between 30th October 1927 to 30th May 1928, catching 27,683 lbs. of fish, of which 2,036 lbs. were sold as fresh, while the rest were gutted and salted on board the trawler, and subsequently cured at the Church Island fish curing yard near Tuticorin. Average catch per haul per hour was 145 lbs. Valuable biological datas were obtained and recorded daily. Samples of sea water were preserved and analysed for chlorine contents. A chart for the whole area so far surveyed showing the nature of the sea bottom, the kind of fish and other marine organisms obtainable, at particular periods at which trawls were made has been got ready. Certain hydrographical and meteorological data were obtained and also recorded. They, however, have not yet progressed far enough for utilization. Other lines of biological research on food fishes, and conditions on which their abundance depends await the provision of a laboratory on board the vessel.

During the intervals between fishing cruises, the trawler did 5 trips from Tuticorin to West Coast with a total quantity of 231,080 Mds. of salt. She was also engaged in dredging of pearl banks off the Tinnevelly coast with a view to ascertain the possibility of finding mother-of-pearl oyster beds in deeper waters than the 9-11-fathoms at present fished by naked divers.

The trawler was at Bombay from July to October 1928 for preparation of estimates for alterations and additions such as a laboratory, and a refrigeration chambers by the Royal Indian Marine Dockyard. The estimates are under consideration of Government. While at Bombay, the Dockyard undertook and completed certain repairs to the engines, etc., that were considered necessary

Welfare Work.—A remarkable feature in the work of the Madras Fisheries Department is the energy which it devotes to the improvement of the condition of the fisherfolk. On Sir Frederick Nicholson's initiative, the department has always recognized the duty of spreading among them education and the habits of thrift, temperance and co-operation. The work has been specially successful on the west coast. The number of fishermen's co-operative societies in 1927-28 was 120. These societies it is reported worked satisfactorily, allowance being made for the inexperience and illiteracy of the members. But the formation and working of co-operative societies are not the only social activity among these fishermen. There is a vigorous temperance society at Mangalore The Collector of South Kanara has granted sites for the construction of village halls for the fishermen in two villages and the fishermen have themselves collected Rs. 3,000 for the building. In another village, Kizhur, the fishermen have already completed a building in which they hold meetings while one elementary school carries on its work in the same building. In Madras itself at Nadukuppam, a temperance organisation has got to work with the assistance of the Fisheries Department. To promote the education of fishermen a training institution was opened in the middle of 1918 at Calicut to train teachers to work in elementary schools for the fisherfolk. The pupil teachers under training are familiarized with the work carried on in the fishery stations at Tanur and Chaliyam. They are given practical instructions in fishing, a boat having been purchased for the purpose. By the end of June 1928, 37 schools for the fisherfolk were being maintained by the department on the west coast with a total of 3,000 pupils. In some places the villagers themselves started the schools and then handed them over to the department. In other places schools were opened by the department at the request of the fishermen. Local men are appointed as honorary managers of schools.

Bengal & Bihar & Orissa.

The fishing value of this extensive deltaic region lies primarily in the enormous area occupied by inland waters—rivers, creeks, jheels, and swamps,—to say nothing of paddy fields and tanks. These swarm with fish and, as the Hindu population are free to a large extent from the aversion to a fish-diet which is widely prevalent among the better castes in the south, the demand for fish is enormous. Rice and fish are indeed the principal mainstays of the population and not less than 80 per cent. of the people consume fish as a regular item of diet. It is calculated that 1·6 per cent. of the population is engaged in fishing and its connected trades, a percentage that rises to 2·6 in the Presidency, Raj Shahi, and Dacca Divisions. 644,000 persons in Bengal subsist by fishing with 324,000 maintained by the sale of fish, and this in spite of the fact that fishing is not considered an honourable profession. As a fresh-water fisherman the Bengali is most ingenious, his traps and other devices exceedingly clever and effective—in many cases too effective—so eager is he for immediate profit, however meagre this may be. The greatest inland fishery is that o fthe hilsa (*Clupea ilisha*) which

annually migrates from the sea in innumerable multitudes to seek spawning grounds far up the branches of the Ganges and the other great rivers. Other valued and abundant fishes are the rohu (*Labeo rohita*) and the katla (*Catla catla*), mrigela (*Cirrit uan nelgeta*); prawns and shrimps abound everywhere. Of important fishes taken in the lower reaches of the rivers and in the great network of creeks spread throughout the Sunderbans, the bekti (*Late calcrifer*) and the mullets are the most esteemed ; apart from these estuarine fish the most valuable sea-fishes are the mango-fishes (*Polynemus*,) pomfrets. The sea-fisheries are as yet little exploited, the fishermen of Orissa, where alone coastal fishing is of any local importance, having no sea craft save catamarans of inferior design and construction.

Following the inquiry begun in 1906 by Sir K. G. Gupta, an investigation of the steam trawl potentialities of the head of the Bay of Bengal was undertaken, the trawler *Golden Crown* being employed for the purpose. The results showed that there are extensive areas suitable for trawling and capable of yielding large quantities of high class fish. Much attention was devoted during these trawl cruises to the acquisition of increased knowledge of the marine fauna, the results being published in the Records and Memoirs of the Indian Museum. For various reasons, the chief perhaps being the hostility of vested interests, the lack of cold storage facilities and the loss of time involved by the trawler having to bring her catches to Calcutta instead of sending them by a swift tender, the experiment was financially a failure and was dropped. With ever-increasing demand for fish in Calcutta and the concurrent rise in prices, the prospects of remunerative steam-trawling are now much more steam trawling companies being floated in the immediate future. The trade is a difficult one to organize and without a rare combination of technical fishery knowledge and far-sighted and comprehensive organization the danger run by the investing public will be considerable. Originally one Fisheries Department served the needs of the two provinces of Bengal and Bihar and Orissa. Separation was effected in after which fisheries in Bengal were administered by the Director of Agriculture. The Bengal Fishery Department was abolished under retrenchment in 1923. In Bihar and Orissa, Fisheries form a section of the Department of Industries.

Government has ordered that the Bengal Fisheries Department be reconstituted on an improved basis as soon as funds permit. A Bengal Fisheries Department has of necessity a more limited scope for its activities than in the case of Madras. Practically no coastal minor industries exist, neither do the natural conditions lead us to suppose that any can be created without extreme difficulty, and in the absence of a great trawl industry which alone might be able to call into existence factories devoted to the uplift of the general utilization of fish byeproducts. Apart from this, much can be done by its officers for the uplift of the general fishing population with a view to free them from the tyranny of the mahajans (fish contractors and middle-men) and enable them to put more capital into their business and to conduct it co-operatively. This is necessarily extremely slow work, but the old Department made a beginning and once a few societies can be made successful, the news of the benefits conferred on the members will constitute the best possible form of propaganda. The temporary abolition of the Bengal Fisheries Department was regretted by many and it is hoped that it will soon be revived. The fishery wealth of Bengal is enormous and nothing but good can come of intensive investigation and propaganda.

Fresh-water mussels are used extensively at Dacca in the manufacture of cheap pearl buttons and in many cases pearls also are found in the mussels which the pearl dealers gather and sell in the various parts of India. The Dacca bangle factories carry on an important local industry of very ancient standing; their material is almost entirely obtained from the South Indian and Ceylon chank fisheries already alluded to.

Bombay.

Whereas Bengal's fisheries are at present confined principally to inland waters, those of Bombay are concerned, save in Sind, almost entirely with the exploitation of the wealth of the sea. Bombay is favoured with a coast line abounding with excellent harbours for fishing craft, a fair-weather season lasting for some seven months, and a fishing population more alive to their opportunities and more daring than those of the sister Presidencies. Bombay sea-fisheries are of very great importance financially as well as economically and, though there is less necessity for a special department to develop marine industries, there is ample scope for most useful work in improving curing methods, in introducing canning, and in the development of minor marine industries particularly those connected with the utilization of bye-products. With this end in view the Director of Industries administered the subject of "Fisheries" from 1918 and had for a time two officers in the Department engaged upon fishery investigation and development. A steam trawler was bought for work in Bombay waters in 1920 and began work in May 1921 off Bombay. The experiment continued until February 1922, and the trawler was subsequently sold to the Government of Burma. At the outset the results seemed promising, but the experiment as a whole showed that the cost of maintaining a trawler of the type used could not be met by sales of fish at current market rates. Cold storage has since been installed at the principal fish market in Bombay, but for a trawler special facilities are needed also for rapid coaling, supplying ice and stores, and for unloading catches. More than this a change is needed in the mediæval conditions under which the local fish market is conducted and there is much to be done in popularising little known species of edible fish, such as karel, palu, tambusa, and particularly the ray or skate which formed on the average 25 per cent. of the total catch but which is so little esteemed locally that it sold on the average at the rate of 100 lbs. for a rupee.

Owing to retrenchment the appointments of Fisheries officers have been abolished.

The more important sea-fish are pomfrets, soles and sea-perches among which are included the valuable Jew-fishes (*Sciœna* spp.) often attaining a very large size and notable as the chief source of "fish-maws" or "sounds." largely exported from Bombay for eventual manufacture into isinglass. The finest of Bombay fishing boats hail from the coast between Bassein and Surat. These boats are beautifully constructed, attain a considerable size, and are capable of keeping the sea for weeks together. In the season they fish principally off the Kutch and Kathiawar coasts and in the mouth of the Gulf of Cambay. Their main method of fishing is by means of huge anchored stow nets, which are left down for several hours and hauled at the turn of the tide. The chief catches are bombil (Bombay ducks), pomfrets and jew-fishes. The first named are dried in the sun after being strung through the mouth upon lines stretched between upright posts. South of Bombay the fishermen of Ratnagiri and Rajapur make use of another and lighter class of fishing boat, specially designed for use in drift-net fishing. Fine hauls of bonito seer (a large form of mackerel) and allied fishes are often made during the season from September to January and later of shark and rayfish. For the latter specially large and powerful nets are employed. For part of the fair season, when fishing is not usually remunerative, many of the larger Bombay fishing boats are employed as small coasters, a fact which show hows large they run in size.

In **Sind** considerable sea-fishing is carried on in the neighbourhood of Karachi chiefly for large and coarse fish, as shark, rays and jew-fishes. The edible oyster trade of Karachi was once extensive, the creeks of the Indus producing a species of oyster superior to that found in Bombay and Madras backwaters and estuaries. Unrestricted exploitation of beds of limited extent inflicted great harm, and now, when various salutary restrictions are imposed, the beds are slow to respond. Occasionally large deposits of the window pane oyster (*Placuna placenta*) are found in the Indus creeks and as these produce seed pearls in abundance, Government leased the beds to the highest bidder. The pearls are largely exported to China for use in medicine. Considerable fisheries exist in the River Indus, chiefly for the fish known as palla, which are annually leased out by Government for about Rs. 20,000.

In the Gulf of Kutch two pearl fisheries exist, one for the true pearl oyster, the other for the window-pane oyster. The former is carried on by His Highness the Maharaja of Jamnagar, the other partly by this Prince and partly by the administration of His Highness the Maharaja Gaekwar of Baroda. The latter industry owes its local existence to the enterprise of the Baroda Government which in 1905 obtained the services on deputation of Mr. J. Hornell, formerly Director of Fisheries in Madras, for the purpose of examining the Marine potentialities of the Baroda territory in Kathiawar. One of the consequences was the discovery of large deposits of pearl-bearing window-pane oysters until then unknown; of late years these beds have produced annually from Rs. 15,000 to Rs. 25,000 in revenue perhaps the best example we have in India of the profitable nature of well-directed scientific enquiry into fishery problems. The Baroda Government, continuing their enlightened interest in the fishery developments, have had two officers trained in the Madras Fisheries Department and now employ them in development work on the Baroda coast.

Experiments in canning are now in progress at one of the chief fishing centres on the Southern Kathiawar coast and already promise considerable success particularly with regard to pomfrets

Burma.

The exclusive right of fishing throughout the province of Burma belongs by custom of the country to Government, and the Burma Fisheries Act provides for the protection of this right and for conceding the enjoyment of it to the people subject to certain restrictions for the conservation of the fish. The work of the fisherfolk, involving as it does the taking of life, is generally viewed with disfavour by the Burman Buddhists. In certain tracts this attitude is intensified where the proportion of the fisherfolk is not only small but their economic conditions are more or less demoralised. Though fishing is generally denounced by Burman Buddhists, yet they consume the fish. The usual argument of the consumers is that they have not taken the life of the fish and therefore have committed no sin. Where fishing is the principal means of livelihood of the majority as in the Delta Districts, religious scruples tend to disappear.

Revenue.—The economic value of any industry or tract of country can, to some extent, be gauged by the revenue it yields. The fisheries yield a substantial revenue (about one-eighth of the total land revenue), and therefore they are one of the most important sources of national wealth. There are two methods of catching fish, namely by nets in the rivers and seas and by traps in leased fisheries. The fishery revenue demand from net licenses amounts to over four lakhs while that from the leased fisheries amounts to more than 46½ lakhs. Of the net licenses the greatest revenue comes from Mergui District where not only is the Pearling industry carried on, but leases for collecting green snails and sea slugs are issued. Open lakes, pools of water and small rivers are classed as leased fisheries and are leased by Government to the highest and best bidders at public auction. Here the Irrawaddy Division equals in importance the rest of the province, and of the five districts in the Irrawaddy Division, Maubin District alone yields as much as half of the whole division. Maubin District therefore stands easily first in respect of fishery revenue, and out of the total collected in any year from the whole province, this district alone contributes about a quarter.

The Delta consists of a series of saucer-shaped islands, many of which have embankments round the greater part of them along the north, east and west; in the hollows of these islands most of the fish come into spawn, and with the floods which overflow the embankment during October the young fry come down-country from Upper Burma.

The principal kinds of fish caught in nets on the sea-coast are (1) Kakkuyan, (2) Kathabaung, and (3) Kathahmyin. These are generally

made into salt fish which fetch Rs. 2 to Rs. 3 per viss. The creek and fresh water fish from fisheries are generally ngakhu, ngayan and ngagyi. Most of them are sold fresh, but some are converted into salt fish. The fish caught in the rivers are generally ngathalauk, gagying, and ngamyinyin, the predaceous fish.

Fees for net licenses are charged according to the size of the nets. Fisheries which consist of lakes, pools and streams are put up to auction, but as no Burman fisherman has ever been known to keep a proper system of accounts, he seldom or never can gauge the real worth of the fisheries; this coupled with his impulsive nature frequently results in his bids at auction exceeding the value of the fisheries; several fishermen have thus not only brought ruin on themselves but also on their sureties who have not infrequently been sold up. Until these fisheries are brought under some settlement system for revenue assessment, bona fide fisherman must suffer from time to time. Moreover, the local authorities demand adequate securities and the furnishing as well as the verifying of these securities invariably mean much expenditure of time and money both to the fisherfolk and to the Government staff. With a view to ameliorate uneconomic conditions by rendering the provisions of security easier, as well as to facilitate collection Government recently introduced what is known as the group system whereby the value of the fisheries is fixed at a reasonable rental, and, intead of an individual system of furnishing security, the groups hold themselves severally responsible. In order to enable the poorest of the actul workers to reap the benefit of their labours, nothing short of a co-operative system would be of any avail; this co-operative system has been tried in Tharrawaddy District with some success, by this system every fisherman employed in a fishery becomes a partner in the business and no non-fisherman can ever sweat the bona fide fisherman, poor though he be. The group system, though an improvement on the individual system of bidding and furnishing securities does not do away with the sweating system. It is reported to be attended by quarreling on the one hand and to condition to reduce the Government rent on the other hand. With the gradual introduction of the co-operative system, which is an urgent necessity in the Delta District, the poorest fisherman of every fishing village and hamlet, after gradual and systematic training will, in course of time, be able, not only to reap the full benefit of their labours, but also by mutual control and aid to develop into a more useful and contented peasantry. Fishery leases for three to five years, are now being granted instead of leases for only one year and fisherman obtaining the long-term leases have begun to realise the need of improving the fisheries by clearing the streams and pools of that Burma pest—the water hyacinth—and other weeds.

The members of a group live too far away from one another to watch one another and their co-operation aimed at by the system is not usually obtained. Another system known Fair Rent and premium system is under consideration and has actually been introduced in Maubin as an experimental measure. Under this system, the lease is fixed at a fair rent and tenders called for and premia invited and the lease is given on a consideration of the premium offered plus the character of the person tendering and his previous connection with the fishing industry. To work this successfully a good deal of information is required about the actual working of the fishery and it is to be hoped that the Fishery Settlement Enquiry which has been set on foot in 1928 will lead to improvement of the Fishery Revenue Administration and increase of Government's information about the fisheries.

The principal articles of manufacture are ngapi (fish-paste) and salt-fish; the manufacturing methods are primitive and with more industrial education and capital, these could be considerably improved.

The Punjab.

There are now 18 districts of the Punjab under the Licensing Rules, and in six districts, in which leases have been in vogue for many years past, special rules have been issued to place the leases on a definite legal basis. This should go far to raise the revenue in these districts, and save the contractors from much petty litigation.

The number of licenses issued during the year shows a steady increase over previous years, thus:—In 1925-26 the total number of licenses issued was 7,277, in 1926-27 they increased to 7,909 and in the year ending 31st March 1928 to 8,197.

The Angler's Association and the Fishing Club at Rawalpindi continue to make steady progress. Trout Culture in the hills is also steadily progressing. Excellent sport was enjoyed thoughout the year in Kulu and in the Mandi State, and the small streams which have been stocked with trout in the Kangra Valley proper now show every indication that the trout are being firmly established. For the first time since experiments were started the Department achieved some success in Carp breeding at Chhanawan and Carp experiments will be carried out in various places in the future. The tanks at Mahopur have now been converted into Mahasir Hatcheries and this experiment will be watched with great interest. A very good sign this year was the very small number of disputes between professional fishermen and zamindars. Friendly relations between them are essential and these have been sadly strained in the past. The total income of the Department during the year ending 31st March 1928 was Rs. 55,363 as against an expenditure of Rs. 55,316.

Travancore.

This State has affiliated fisheries to the Department of Agriculture and with the help of two officers trained in Madras and another officer trained in Japan, the Department has already accomplished a notable amount of development work. Special attention has been given to the regulation of fisheries in backwaters, to the establishment of co-operative societies among the fishing community and to the introduction of improved methods of sardine oil and guano production. Useful work has been done by one of the officers in elucidating the life-histories of the more valuable food fishes and prawns.

The Forests

Even in the earliest days of the British occupation the destruction of the forests in many parts of India indicated the necessity for a strong forest policy, but whether or not our earlier administrators realized the importance of the forests to the physical and economic welfare of the country, the fact remains that little or nothing was done. The year 1855 marked the commencement of a new era in the history of forestry in India, for it was then that Lord Dalhousie laid down a definite and far-sighted forest policy. Further progress was delayed for a time by the Mutiny, but from 1860 onwards forest organization was rapidly extended to the other provinces. The earlier years of forest administration were beset with difficulties, which is not surprising considering that the Department was charged with the unpopular duty of protecting the heritage of Nature from the rapacity of mankind a duty which naturally roused the antagonism of the agricultural population of India. Exploration, demarcation and settlement, followed by efforts to introduce protection and some form of regular management, were the first duties of the Forest Department. Work on these lines, which is not yet completed in the more backward parts of the country, has been pursued steadily from the commencement, and in consequence large tracts of forest have been saved from ruin and are gradually being brought under efficient management. Whatever may have been the opinions held in some quarters half a century ago as to the need for a policy such as that expressed in Lord Dalhousie's memorable enunciation of 1855, there is no longer any doubt that results have amply justified the steps taken, and that in her forests India now possesses a property of constantly increasing value, the future importance of which it is hardly possible to overestimate.

Types of Forest.—More than one-fifth of the total area of British India (including the Shan States) is under the control of the Forest Department. These areas are classified as reserved, protected or unclassed State forests. In the reserved forests rights of user in favour of individuals and the public are carefully recorded and limited at settlement while the boundaries are defined and demarcated; in the protected forests the record of rights is not so complete, the accrual of rights after settlement not being prohibited, and the boundaries are not always demarcated; while in the unclassed forests no systematic management is attempted, and as a rule the control amounts to nothing more than the collection of revenue until the areas are taken up for cultivation or are converted into reserved or protected forests. The total forest area of British India (including the Shan States) on 31st March 1927 was 251,755 square miles or 22·8 of the total area. This was classed as follows : Reserved 105,285 ; Protected 8,626 ; Unclassed State, 137,844.

Throughout this vast forest area, scattered over the length and breadth of India from the Himalayan snows to Cape Comorin and from the arid juniper tracts of Baluchistan to the eastern limits of the Shan States, there is, as may be imagined, an infinite variety in the types of forest vegetation, depending on variations of climate and soil and on other local factors. Broadly speaking, the following main types of forest may be distinguished:—

(1) Arid-country forests, extending over Sind, a considerable portion of Rajputana, part of Baluchistan and the south of the Punjab, in dry tracts where the rainfall is less than 20 inches. The number of species is few, the most important tree being the babul or kika- (*Acacia arabica*), which however in the driest regions exists only by the aid of river inundations.

(2) Deciduous forests, in which most of the trees are leafless for a portion of the year. These forests, which extend over large areas in the sub-Himalayan tract, the Peninsula of India and Burma, are among the most important, comprising as they do the greater part of the teak and sal forests.

(3) Evergreen forests.—These occur in regions of very heavy rainfall, such as the west coast of the Peninsula, the eastern sub-Himalayan tract, and the moister parts of Burma and are characterized by the great variety and luxuriance of their vegetation.

(4) Hill forests.—In these the vegetation varies considerably according to elevation and rainfall. In the Eastern Himalaya, Assam and Burma, the hill forests are characterized by various oaks, magnolias and laurels, while in Assam and Burma the Khasia pine (*Pinus khasya*) grows gregariously at elevations of 3,000 to 7,000 feet. In the North-Western Himalaya the chief timber tree is the deodar (*Cedrus deodara*), which occurs most commonly at elevations of 6,000 to 8,000 feet, and in association with oaks or blue pine (*Pinus excelsa*); towards its upper limit the deodar merges into very large areas of spruce and silver fir, while below it are found extensive forests of the long-needled pine (*Pinus longifolia*) which is tapped for resin.

(5) Littoral forests.—These occur on the sea coast and along tidal creeks. The most characteristic trees belong to the mangrove family (*Rhizophoreae*). Behind the mangrove belt is an important type of forest occasionally inundated by high tides, in which the most valuable species is the "sundri" (*Heritiera fomes*).

Forest Policy.—The general policy of the Government of India in relation to forests was definitely laid down in 1904 by the classification of the areas under the control of the Department into four broad classes, namely:—

(*a*) Forests the preservation of which is essential on climatic or physical grounds. These are usually situated in hilly country where the

retention of forest growth is of vital importance on account of its influence on the storage of the rainfall and on the prevention of erosions and sudden floods.

(c) Forests which afford a supply of valuable timbers for commercial purposes, such, for example, as the teak forests of Burma, the sail forests of Northern, Central, and North-Eastern India, and the deodar and pine forests of the North-Western Himalaya.

(c) Minor forests, containing somewhat inferior kinds of timber, and managed for the production of wood, fodder, grazing and other produce for local consumption; these forests are of great importance in agricultural districts.

(d) Pasture lands.—These are not "forests" in the generally understood sense of the term, but grazing grounds managed by the Forest Department merely as a matter of convenience.

These four classes of forest are not always sharply divided from each other, and one and the same tract may to a certain extent be managed with more than one object.

Administration.—The forest business of the Government of India is carried out in the Department of Education, Health and Lands. The Inspector-General of Forests is also President of the Forest Research Institute at Dehra Dun and is the technical adviser to the Government of India in forest matters. Under the Constitution of 1919 Forests were made a transferred subject in Bombay and Burma, where they had long been administered by the Provincial Governments, and in 1924 the Reforms Inquiry Committee presided over by the Hon. Sir Alexander Muddiman, Home Member of the Government of India, recommended that they be transferred in other provinces now unless any local Government on examination of the position can make out a convincing case against the transfer in its own province.

Territorial charges.—The various provinces are divided into one or more Forest Circles; each in charge of a Conservator of Forests; provinces containing three or more circles also have a Chief Conservator who is the head of the Department for his province. Circles are divided into a number of Forest Divisions, in charge of members of the Imperial or Provincial Forest Service; these Divisions in most cases correspond to civil districts. Each Division contains a number of Ranges in charge of junior members of the Provincial Service or of Forest Rangers or Deputy Rangers; heavy Divisions are also sometimes divided into Subdivisions. The Ranges are further subdivided into a number of beats or protective charges held by Forest Guards or in some cases by Foresters.

Non-territorial charges.—Apart from territorial charges there are various important posts of a non-territorial nature connected with Forest Research and Education, the preparation of Forest Working Plans, and other special duties.

The Forest Service.—The Forest Service comprises three branches:—

(1) The Indian (Imperial) Forest Service with a sanctioned total personnel of 399 officers consisting of the Inspector-General of Forests, Chief Conservators, Conservators, Deputy and Assistant Conservators. Of these 353 are to be recruited direct to the service and the balance obtained by promotion from the Provincial Forest Service. The officers of this service are recruited as probationers subject to the following methods prescribed in the Indian Forest Service (Recruitment) Rules, 1928:—

(a) by nomination in England in accordance with ...... these rules and such supplementary regulations as may be prescribed by the Secretary of State in Council:

(b) by competitive examination in India in accordance with ....these rules and such supplementary regulations as may be prescribed by the Governor-General in Council;

(c) by direct appointment in accordance with...... these rules of persons selected in India otherwise than by competitive examination;

(d) by the promotion in accordance with ......these rules on the recommendation of local Governments of members of the Provincial Forest Services;

(e) by the transfer of promotion in accordance with......these rules of an officer belonging to a branch of Government Service in India other than a Provincial Forest Service.

The Rules provide that all appointment to the Indian Forests Service shall be made by the Secretary of State for India in Council; that no appointment shall be made to the Indian Forest Service by any method other than the five just quoted and that, subject to this last mentioned condition, the method or methods of recruitment to be employed for the purpose of filling any particular vacancies in the Indian Forest Service or such vacancies therein as may be required to be filled during any particular period and the number of candidates to be recruited by each method, shall be determined by the Secretary of State in Council.

(2) **The Indian Forest Engineering Service.**—This service was created in 1919 and at present consists of 17 Forest Engineers.

(3) **The Provincial Service.**—Formerly it consisted of Extra Deputy and Extra Assistant Conservators of Forests. All Extra Deputy Conservators who were considered to be fully qualified to hold a major charge were transferred to the Imperial Forest Service in 1920. Except for five unpromoted officers the class of Extra Deputy Conservators has been abolished and the service now consists of Extra Assistant Conservators only. The fixation of the strength of the personnel of the service rests with the local Governments.

Officers of this service are eligible for promotion to 12½ per cent. of the posts in the Indian Forest Service, such promotion being made by the Secretary of State for India. These officers are recruited and trained in India, their recruitment being a matter for the local Governments. A certain number of posts in the

service are filled by the promotion of specially promising Rangers. Owing to the establishment of a course for the training of probationers for the Indian Forests Service at Dehra Dun since 1926, the Provincial Service course ceased to exist from 1928.

(4) The Subordinate Service, consist of Forest Rangers (about 840), Deputy Rangers (about 900), Foresters (about 2,000) and Forest Guards (about 11,500). The Rangers are at present trained at three different centres—the Forest College at Dehra Dun (for provinces other than Burma, the Central Provinces, Bihar and Orissa, Bombay and Madras), the Burma Forest School at Pyinmana (for Burma), and the Madras Forest College at Coimbatore (for Madras, Bihar and Orissa, Bombay and the Central Provinces). These three institutions were established in 1878, 1898 and 1912 respectively. The training of subordinates below the rank of Ranger is carried out in various local forest schools and training classes.

Research.—For the first fifty years of the existence of the Forest Department in India no attempt was made to organize the conduct of forest research, and thus to co-ordinate and elaborate the scientific knowledge so necessary to successful economic working. A commencement in organized forest research was at last made in 1906 by the establishment, at the instance of Sir Sainthill Eardley-Wilmot, then Inspector-General of Forests, of a Forest Research Institute at Dehra Dun. The Forest Research Institute, which is under the administrative control of the Inspector-General of Forests, is in the charge of a President. There are five main branches of research, namely Sylviculture, Forest Botany, Forest Economic Products, Entomology and Chemistry, each branch being in charge of a research officer. In addition specialists are appointed temporarily when necessary and are attached to the Institute to carry out investigations in subjects of particular economic importance. Thus a paper pulp expert has been employed for some time to investigate possible new sources of paper-making materials of which the forests of India contain abundant supplies. Besides this, there are the Seasoning, the Timber Testing, and the Wood Preservation experts engaged temporarily on short term contracts. Indian Assistants have been appointed under them to receive the necessary technical training and experience in these subjects, with the object of eventually taking the place of experts if and when properly qualified.

Since 1906 research work has been prosecuted energetically so much so that in 1920 a new scheme was sanctioned for the expansion of the staff and site of the Institute. Since then new land has been acquired, on which new buildings are being built for accommodating the various expanded branches and the new machinery obtained from the United Kingdom. As a result of this and the employment of specialists in Seasoning, Timber Testing and Wood Preservation steady progress is being made in the investigations which should ultimately lead to the fuller and better utilization of the raw products produced by Indian forests.

Forest Products.—Forest produce is divided into two main heads—(1) Major produce, that is timber and firewood, and (2) Minor produce, comprising all other products such as bamboos, leaves, fruits, fibres, grass, gums, resins, barks, animal and mineral products, etc. The average annual outturn of timber and fuel from all sources during the quinquennium ended 31st March 1924, the latest date for which statistics are available, was 36,06,40,000 cubic feet against an average of 30,72,00,000 cubic feet per annum attained in the preceding quinquennium. The highest figure ever attained under this head occurred in 1921-22, when a total of 36,13,83,000 c.ft. was reached, the year 1923-24 coming next with 35,36,90,000 c.ft. The figures for 1921-22 and 1923-24 represent respectively 2·3 and 2·4 c.ft. per acre of all classes of forests. For reserved forests only the yield in 1923-24 was 3·7 c.ft. per acre as compared with 3·3 c.ft. per acre in 1918-19, the last year of the last preceding quinquennium. The year 1921-22 was marked by a phenomenal output of teak in Burma, *viz.*, 600,000 tons (30,000,000 cubic feet), which was more than 74 per cent. above the average annual output of the preceding quinquennium. With the output of teak for the year the revenue in Burma soared to Rs. 2,21,16,786 and the surplus to Rs. 1,30,33,692. The total outturn for the five years amounted to 2,476,849 tons, an increase of 751,000 tons, or 44 per cent. over the output in the preceding quinquennium.

The figures for the last quinquennium for which a report has been issued show that in 1923-24 the ratio of timber extracted by Government agency to that removed by purchasers was 5 to 29 compared with a ratio of 5 to 27 in 1919-20. During the period the outturn removed by Government agency rose by 41 per cent. whilst that removed by purchasers increased by 19 per cent. Timber and fuel to the value of Rs. 11,140 lakhs and minor products, including bamboos and grass, valued at Rs. 375 lakhs were removed by purchasers during the period. For the quinquennium 1918-19 the figures were Rs. 10,190 lakhs and Rs. 355 lakhs respectively.

Reviewing the figures of outturn, Government in a report issued in October 1925, says: "The results on the whole, considering the general trade depression, are most satisfactory and point to more intensive working of the forests and to better exploitation."

Forest Industries.—The important role which the forests of a country play in its general commercial welfare and in providing employment for its population is not always fully recognized. Fifteen years ago it was estimated that in Germany work in the forests provided employment for 1,000,000 persons while 3,000,000 persons, earning £30,000,000 a year, were employed in working up the raw material yielded by the forests. If accurate estimates were available for India, they would no doubt show that apart from the jungle population which is directly dependent on the forests and the large numbers of wood-cutters, sawyers, carters, carriers, raftsmen and others working in and near them, employment on an excessive scale is provided to persons engaged in working up the raw products. Among these latter may be mentioned carpenters, wheelwrights, coopers, boat-builders, tanners, rope-makers, lac-manufacturers, basket-makers, and

many other classes of skilled labourers. The Indian census shows over a million people and their dependents so employed in British India and nearly a further half million in Native States, but these are probably below the actuals, as much forest labour is not whole-time labour, devoting seven or eight months in the year to forest work and the rest to agriculture. With the opening up of the forests, the extension of systematic working, the wider use of known products, and the possible discovery of new products, a steady and extensive development of industries dependent on the forests of India may be confidently anticipated in the future.

Financial Results.—The steady growth of forest revenue, expenditure and surplus during the past 50 years is shown in the following statement, which gives annual averages for quinquennial periods:—

Financial Results of Forest Administration in British India from 1864-65 *to* 1923-24 (*in lakhs of rupees*).

Quinquennial period.	Gross revenue average per annum).	(Expenditure average per annum)	Surplus (average per annum).	Percentage of surplus to gross revenue.
	Lakhs.	Lakhs.	Lakhs.	Lakhs.
1864-65 to 1868-69	27·4	23·8	13·6	36·4
1869-70 to 1873-74	56·3	39·3	17·0	30·2
1874-75 to 1878-79	66·6	45·8	20·8	31·2
1879-80 to 1883-84	88·2	56·1	32·1	36·4
1884-85 to 1888-89	116·7	74·3	42·4	36·2
1889-90 to 1893-94	159·5	86·0	73·5	46·1
1894-95 to 1898-99	177·2	93·0	79·2	44·7
1899-1900 to 1903-04	196·6	112·7	83·9	42 7
1904-05 to 1908-09	257·0	141·0	116·0	45·1
1909-10 to 1913-14	296·0	163·7	132·3	44·7
1914-15 to 1918-19	371·3	211·1	160·2	43·1
1919-20 to 1923-24	551·7	367·1	184·6	33·5

The gross revenue and surplus were Rs. 468·2 lakhs and Rs. 179·4 lakhs in 1918-19 and Rs. 544·9 lakhs and Rs. 195·6 lakhs in 1923-24 respectively. The surplus rose from Rs. 1,79,42,726 in 1918-19 to Rs. 2,19,12,540 in 1919-20, but during the next three years it steadily decreased, rising again to Rs. 1,84,60,547 during the last year of the quinquennium. The surplus in 1923-24 represents an average of 2·1 annas per acre of all classes of forest against 1·8 annas in 1918-19. The total surplus rose from Rs. 1,79,42,726 in 1918-19 to Rs. 1,95,60,943 in 1923-24. Government, reviewing the figures, state: " Financially, the Forest Department has had during the quinquennium to undergo a severe strain, even since the slump set in following on the short lived post-war boom in trade. But development solely with a view to increase the resources and earning capacity of the forests has never been lost sight of. Judging by the perceptible improvement in the general financial results all round, it is confidentally expected that the improvements initiated in this quinquennial period will produce much better results when the slump ends."

Prospects.—The past work of the Forest Department has already borne fruit, not only in a steady rise of revenue but also in the improved condition of the forests resulting from careful protection and tending. Much has been done in the way of opening up the forests to regular exploitation; but there is still room for enormous development in this respect, for there are extensive areas of valuable forest as yet almost untouched, and these represent a vast capital locked up and not only lying idle but even deteriorating. Perhaps the two most pressing needs at present are the introduction of improved sylvicultural systems and the extension of roads and other export works to facilitate and cheapen extraction. These two must proceed simultaneously, since they are inter-dependent, for it is obvious that timber and other produce can be extracted far more economically if it is available in large quantities within a limited radius than if it is scattered in small quantities over large tracts of country; indeed this question must often decide whether extraction is possible or not. Sylviculture teaches us how to effect this concentration and is therefore the bed-rock on which future results, financial and otherwise, must rest; it is of little avail to seek and develop new markets for timbers and other products if these cannot be produced in regular and sufficient quantities and extracted at a reasonable cost.

Forest Products: Exploitation.—The exploitation by the Forest Department, as a Commercial Department on business lines, of the great timber forests which are among the most valuable natural assets of the country, continues to attract the special attention of the various local Governments. In Madras, for instance, the working of the Forest panchayat system, whereby the increased knowledge of the difficulties of forest administration which the villager obtains when he has a voice in forest management is bringing home to him an understanding of the necessity for that administration. A further important step taken in regard to forest exploitation was the recruitment of a Chief Forest Engineer and a Logging

AREA of FOREST LANDS, OUTTURN of PRODUCE, and REVENUE and EXPENDITURE of FOREST DEPARTMENT.

Province.	Area of Province	Forest Area. Reserved Forests.	Protected Forests.	Unclassed State Forests, &c.†	Total.	Proportion of Forests to whole Area of Province	Outturn of Produce. Timber and Fuel.	Minor Produce.	Revenue.	Expenditure.	Surplus.
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Per cent.	Cub. ft.	Rs.	Rs.	Rs.	Rs.
Madras	143,290	19,028	..	328	19,356	13·5	25,639,000	19,28,666	56,23,700	51,25,413	4,98,287
Bombay	123,282	13,737	1,220	..	14,957	12·1	55,687,000	18,46,186	76,56,420	43,59,516	32,96,904
Bengal	76,755	5,277	1,806	3,445	10,528	13·7	37,556,000	5,52,049	31,23,841	17,34,761	13,89,080
United Provinces	106,720	5,168	4	38	5,210	4·8	33,655,000	16,98,212	58,71,303	32,94,178	25,77,125
Punjab	97,281	1,637	4,371	641	6,649	6·8	31,412,000	27,28,582	39,07,731	27,05,504	12,02,227
Burma (including Federated Shan States and Karenni)	(a)243,207	(b)23,647	..	(b)94,552	(b)123,199	67·4	110,050,700	15,23,158	2,35,94,060	89,40,884	1,46,53,176
Bihar and Orissa	82,936	1,796	1,225	3	3,024	3·6	8,494,000	2,61,338	9,43,752	9,84,095	—40,343
Central Provinces & Berar	99,947	19,657	..	..	19,657	19·6	38,228,000	29,87,085	53,21,376	36,48,691	16,72,685
Assam	51,825	6,011	..	14,675	20,686	39·9	19,477,000	8,62,376	31,33,473	14,47,506	16,35,967
North-West Frontier Province	13,183	236	..	10	246	1·8	2,952,000	67,488	7,91,166	6,54,810	1,36,356
Baluchistan	54,228	313	..	472	785	1·4	415,022	44,353	27,942	32,422	—4,480
Ajmer-Merwara	2,767	140	..	..	140	5·06	458,521	50,064	66,934	79,728	—12,794
Coorg	1,582	519	..	..	519	32·8	427,467	26,066	4,58,145	2,84,770	1,73,375
Andamans and Nicobars ..	3,143	52	..	2,139	2,191	69·7	2,544.196	7,342	11,70,863	12,20,097	—49,234
Total 1926-27 ..	1,100,146*	102,218	8,626	116,303	227,147	20·6	362,035,906	1,45,87,9[illegible]3	6,19,64,731c	3,55,32,799d	2,72,85,182e
Totals. 1925-26 ..	1,099,888*	101,953	8,405	117,292	227,650	20·7	410,617,323	1,43,11,941	5,98,70,825	3,39,63,202	2,69,86,633
Totals. 1924-25 ..	1,099,972*	103,764	8,278	117,854	229,896	20·8	255,289,800	1,37,13,591	5,67,44,683	3,54,31,978	2,26,12,964
Totals. 1923-24 ..	1,100,112*	103,449	7,931	117,470	228,850	20·8	354,534,164	1,48,42,307	5,44,91,224	3,49,39,281	1,95,60,943
Totals. 1922-23 ..	1,100,902*	100,922	7,238	115,541	223,701	20·3	349,958,974	1,45,71,518	5,52,14,072	3,95,72,604	1,56,41,468
Totals. 1921-22 ..	1,098,341*	103,789	7,550	138,165	249,504	22·7	361,383,074	1,38,07,264	5,83,16,[illegible]71	4,08,51,878	1,74,64,193
Totals. 1920-21 ..	1,082,266*	103,491	7,516	139,466	250,473	23·1	298,653,989	1,36,00,627	5,41,43,495	3,64,19,907	1,77,23,588
Totals. 1919-20 ..	1,080,814*	103,093	7,941	14,005	250,949	23·2	339,515,833	1,28,77,188	5,36,75,739	3,17,63,199	2,19,12,540
Totals. 1918-19 ..	1,080,794*	101,639	8,557	141,272	251,468	23·3	343,850,918	1,42,04,588	4,68,18,231	2,88,75,505	1,79,42,726
Totals. 1917-18 ..	1,080,650*	101,233	8,762	141,527	251,512	23·3	328,666,379	1,36,75,668	4,09,69,257	2,11,57,063	1,98,12,194

* Excludes Delhi Province and the British Pargana of Manpur (Central India).

† Unclassed state forests or 'public forest lands,' as they are often called, include in many provinces all unoccupied waste, often entirely devoid of trees. So the statistics do not necessarily represent the wooded area.

(a) Includes 60,593 square miles for Federated Shan States. (b) Excluding figures for Shan States and Karenni.

(c) Including Rs 2,74,025 on account of receipts under the head Imperial Forest College.

(d) Including expenditure under the following heads of the sums stated against them—Imperial (Rs. 1,23,858), Imperial Forest College Rs. 8,96,566).

(e) After taking into account deficits under the following heads of the sums stated against them—Imperial (Rs.—1,23,858), Imperial Forest College (Rs.—6,22,541)

Engineer from America. In Burma the work under way in the Government Timber Depot at Rangoon proves to be of great value to Government from the point of view of revenue and of considerable importance to the public from the point of view of industrial development. Research work on the seasoning of timbers has been started and results which promise to be of great value have already been obtained. Experimental work on the manufacture of furniture and in other similar directions are expected to give a value to a number of different timbers which are at present more or less unknown. The Myitmaka River Training Works started in 1905, which have since then been continued for the sale of Government teak timber, are of more than departmental interest. These works have also proved of great value to local people inasmuch as they have led to the reclamation of a very considerable amount of land which was previously too low lying and swampy to be fit for cultivation. In the United Provinces, the institution of the Government Sawmill and Turnery, the Government Central Wood Working Institute and the Resin Distillery have led to important results. These, and many other examples which could be quoted, go to show that local Governments are fully alive to the importance of exploiting their forest resources to the fullest possible extent for the benefit of the country

Agencies.—An agency has been established in India by the Government of India for the sale of Government timber and it is at present held by Messrs. Martin & Co., Calcutta. The agency held in England by Messrs. W. W. Howard Brothers terminated in December 1926 and the work of marketing Indian timbers in England (especially Andaman timbers) is now done under the direction of a Timber Adviser who is attached to the Office of the High Commissioner for India.

Bibliography.—A large number of bulletins and other publications has been issued by the Forest Research Institute, and of these a list can be obtained from the Superintendent, Government Printing, India, Calcutta.

PAPER MAKING.

There are five large paper mills in the country working on up-to-date Western lines, *viz.*, at Titagarh, Kankinara and Raniganj in Bengal, the Upper India Couper Mills at Lucknow and the Reay Mill at Poona. There are also two smaller mills at Bombay and Surat which make only country paper, and there are one or two other mills which recently were not working. The five large mills have a large Government connection, as the greater part of Government orders for paper is placed in India.

During the past year an interesting experimental paper-making plant has been installed at the Government of India Forest Research Institute at Dehra Dun. Specially designed to incorporate a new system patented by Mr. Raitt, Cellulose Expert to the Government of India, the object of this plant is to test the various paper-making fibres which are available over vast forest and hill areas in India and Burma, and thus encourage the establishment of pulp and paper mills on a commercial scale.

After many delays the Carnatic Paper Mills Company commenced operations at Rajahmundry, on the Godavari river, during the year, and it is estimated that the daily output will be ten tons of pulp and five tons of paper made from bamboos and paddy straw. In Southern India the Sri Minakshi Paper Mills, established many years ago as a small concern in Travancore State, appears to have taken a new lease of life and has ordered a new plant capable of turning out fifteen tons of paper per day, whilst in Assam a new company has been formed and is said to be waiting for the arrival of its plant. At Chittagong a new plant for manufacturing paper pulp from bamboos has commenced operations whilst another company has obtained a comprehensive concession for Bhabbar grass in the Punjab and is erecting a factory are the headworks of the Western Jumna Canna about 200 miles from Lahore.

The possibility of utilising the dense growths of bamboo in the hinterland of Cuttack has again been under consideration during the year, and the project has been investigated afresh by Mr. Raitt on behalf of the Government of Bihar and Orissa. Mr. Raitt estimates that in this area alone there is sufficient raw material for an output of 10,000 tons of paper pulp per annum.

Raw Materials.—The existence of the local industry depends chiefly on the supply of Sabai grass which on account of unfavourable seasons sometimes yields short crops. It is of great importance, therefore, to look for materials according a constant outturn, and various reports have been published on the available paper-making materials. Considerable attention has been devoted to **Bamboo**, since 1875 when it was found that this plant—of which there are four chief varieties in India—yielded a fibrous paper stock which made a quality of paper superior to esparto grass and at a considerably less cost. It was at that time estimated that one acre of bamboo would yield 10 tons of dried stems equivalent to 6 tons of merchantable cellulose. In 1905 Mr. R. W. Sindall was invited by Government to visit Burma with a view of enquiring into the possibility of manufacturing paper pulp. His report on the subject appeared in March 1906. He made numerous experiments with bamboo and woods of Burma and laid down lines along which further enquiry should be made. Subsequently Mr. W. Raitt, a pulp expert, was engaged at the Forest Research Institute in conducting tests on the treatment of bamboos by the soda and sulphate processes, the treatment of bamboo before

boiling, with remarks on the utilisation of nodes and internodes. His results were embodied in the "Report on the investigation of Bamboo or Production of Paper-pulp," published in 1911. Mr. R. S. Pearson of the Forest Service, Dehra Dun, as the outcome of enquiries made throughout India published in 1912 a note on the Utilization of Bamboo for the manufacture of Paper-pulp. The yield per acre from bamboo is larger than that of grasses usually used for paper. The cost of working into pulp has been estimated to yield a product cheaper than imported unbleached spruce sulphite and unbleached sabai grass pulp. In 1915 Mr. Dhruva Sumanas published a pamphlet, Dendrocalamus Strictus Bamboo of the Dangs, as the result of investigations carried on in Bansda State.

In a paper read before the Royal Society of Arts in 1921 Mr. Raitt gave an answer to the question: "**What India can do** to fill the gap in the world's shortage of paper?" He said that he thought it was "a modest estimate to say that from bamboo, taking only that which is available under 'possible' manufacturing conditions, Burma, Bengal and South West India could produce ten million tons of pulp per annum, and Assam from Savannah grasses three million. India could therefore produce pulp for the whole world."

The leading Indian **paper grass** for the ast thirty years has been the bhaib, bhabar, or sabai grass of Northern India. It is a perennial grass plentiful in drier tracts from Chota Nagpur and Rajmahal to Nepal and Garhwal. The Calcutta mills draw their supplies from Sahibganj, Chota Nagpur and the Nepal Terai. The quantity annually exported from Sahibganj is between three to four lakhs of maunds. The cutting in these districts is said to commence in October when the plants are six or seven feet high. Sabai grass yields from 36·6 to 45·5 per cent. of bleached cellulose. A report by Mr. R. S. Pearson, Forest Economist, Dehra Dun, on the use of **elephant grasses** in Assam was issued in 1919. The most important species of grass found in the areas in which investigation has been made are Khagra (*Saccharum spontaneum*) and Batta (*Saccharum narenga*), with patches of Nal (*Phragmites karka*) on the more swampy ground. Hand samples of the above grasses were sent to England to be tested on a laboratory scale, while several tons were sent to an Indian paper mill to be made into paper. The results were satisfactory and proved that a very fair quality of paper can be produced from these grasses at a relatively low price. Small samples of such paper can be obtained by persons interested in these grasses from the Forest Economist, Forest Research Institute, Dehra Dun, who can also supply further details.

Indian paper manufacture is protected by special provisions in the import tariff.

WIRELESS TELEGRAPHY AND TELEPHONY.

Beam Stations.—The year 1927 saw the commencement of Beam wireless services on the Marconi system between India and the United Kingdom. Powerful transmitting and receiving stations erected at Poona and Dhond respectively by the Indian Radio Telegraph Company are connected by land lines with the Central Telegraph Office in Bombay, whilst stations at Skegness and Grimsby are similarly connected with the General Post Office in London, and the circuits are so arranged that messages are exchanged between Bombay and London without intermediate handling at the Beam stations at either end. The huge aerial systems at Poona and Dhond, each supported on five steel towers 287 feet in height, are landmarks over a distance of many miles. The service was inaugurated by His Excellency the Viceroy on 23rd July 1927 at the Central Telegraph Office, Bombay, when His Excellency transmitted a message to the King and His Majesty's reply was received a few minutes later.

It is noteworthy that the opening of the Beam wireless service coincided with a reduction in rates by the Cable companies.

For reasons of economy, most of the inland wireless stations in India have been practically closed down and placed in charge of "Care and Maintenance" parties which carry out tests twice a month, the exceptions being Peshawar Radio, which maintains official communication with Kabul in Afghanistan and Kashgar in China, and Jotogh Radio which receives British Official Wireless sent out from Oxford and Rugby and passes the messages to Reuter's Agency for distribution to subscribing newspapers.

The coast stations, however, have been maintained in a state of high efficiency and many improvements effected. The application of the Baudot system to the high-speed continuous-wave wireless stations at Madras Fort and Mingaladon (Rangoon) has proved extremely satisfactory, and a large portion of the traffic between Southern India and Burma is regularly worked by this direct route instead of the circuitous route *via* Calcutta. The traffic is interrupted occasionally by atmospheric interference, particullary during the hot weather, but the difficulties have been largely overcome by handspeed working during the worst periods.

For many years the Bombay stations known as Bombay Radio was located on Butcher Island in the Harbour, but during 1927 a fine new station equipped with modern apparatus was erected and taken into service at Santa Cruz, just outside the limits of Bombay Municipality.

Radio telegrams exchanged with ships at sea by coast stations in India and Burma continue to increase in number, and now total about 20,000 per annum. Official telegrams are exchanged with the British Naval station at Matara (Ceylon) *via* Bombay Radio. Regular services are also maintained between Burma and the Malay Peninsula *via* Rangoon and Penang and between Burma and Sumatra, whilst radio traffic is passed between Madras and Colombo when the normal route is interrupted.

Wireless telephonic communication between pilot vessels, lighthouses and shore stations are maintained by the Port Trusts at Bombay and Rangoon.

Safety at Sea.—A noticeable feature of wireless development during the past two years has been the provision of direction-finding apparatus at Bombay and Karachi and facilities at other coast stations whereby ships at sea equipped with direction-finding apparatus can obtain bearings on coast stations and thus determine their position with a remarkable degree of accuracy. Improved arrangements for broadcasting time signals, weather reports and navigational warnings from coast stations have also proved of value to ships at sea.

Broadcasting.—For several years, limited broadcasting services were maintained by Radio Clubs in Calcutta, Bombay, Madras, Karachi and Rangoon, and although the transmitting sets employed by them were of very low power, the broadcasts were tuned-in over practically the whole of India. The clubs were assisted financially by a Government contribution based upon the revenue from license fees, but this did not nearly suffice to cover the cost of the transmissions, and the greatest credit is due to the members of those clubs for the sporting manner in which they provided additional funds and undertook the entire responsibility for the programmes. Credit is also due to the Indian States and Eastern Agency for the loan of transmitting apparatus, without which the broadcasts would have been impossible.

After negotiations extending over several years, an Indian Broadcasting Company was granted a license to establish broadcasting services upon lines similar to those of the British Broadcasting Corporation, and transmitting stations were erected in Bombay and Calcutta, the services at the former being inaugurated by His Excellency the Viceroy in July 1927 and the latter by the Governor of Bengal a month later. These stations have each an aerial imput of three kilowatts, the same as that of the 2LO stations in London, of which they are practically duplicates. The programmes are so arranged that both Indian and European music are broadcast daily and the news bulletins and market and weather reports are read in two languages.

Bombay broadcasts normally on a wavelength of 357 metres, and Calcutta on 370 metres, Reception in either of these cities, and for a distance of twenty or thirty miles around, is possible on crystal sets, of which a very large number have been sold. Valve sets are necessary for those living further afield, but although there has been a considerable demand for these, the sales have not reached expectation. One of the greatest difficulties in India is the maintenance of batteries, which is no inconsiderable item when sets containing five or six valves are employed and it is partly with a view to overcoming this problem and to render broadcasting available on two-valve sets in any part of India, that the Broadcasting Company is investigating the possibility of transmitting simultaneously no long and short waves.

Reports of the reception of foreign short-waves stations have been received from all parts of the country, and upon several occasions the Bombay station of the I. B. C. has relayed the programmes from the Dutch station PCJJ., but the results have not been entirely satisfactory.

The Indian Broadcasting Company has sprung a bombshell on the public by announcing that its revenue from license fees is insufficient to meet expenses and hinting that there are in the country a very large number of people who come within the radio category of "pirates." *i.e.*, those who have neglected, wilfully or otherwise to purchase the licence from which the Company derives the major portion of its income. The position has improved, however, since the institution of a number of prosecutions.

In addition to the Radio Clubs mentioned earlier, new ones have been formed recently at Lahore and Bhusaval.

Licenses.—Broadcast receiving licenses are issued at Head Post Offices at a fee of ten rupees per year, and cover the use of receiving sets throughout British India except Baluchistan and the North-West Frontier Province. Up till the end of October 1927 1,962 such licenses had been issued, 1,103 of them in Bombay. It is believed, however, that the number has since increased very substantially. Licenses for fixed stations for transmitting and experimental purposes are much sought after, and despite a careful scrutiny of the applicants, more than 300 have been issued. The number of traders in wireless apparatus who are required to take out special Import licenses has increased considerably during the past year. This improvement must be ascribed primarily to the commencement of broadcasting (*q.v.*)

Prospects.—The Government of India has always encouraged the development of wireless in India by private enterprise and it is to this source that India must look in the immediate future for internal radio communication. There are two most promising lines of development *viz.*:—

(*a*) Erection of small sets either for speech or morse in districts where no land lines exist, and to link such districts with the existing landlines. In this connection it may be remarked that modern small radio sets are capable of using either morse or speech at will and if used for speech can be operated by the ordinary desk telephone instrument in daily use all over India.

(*b*) The use of radio as a substitute for landline to form the trunk telephone route between two cities which already have telephone facilities.

These will open up a new industry which if properly fostered would vary soon extend its sales outside the limits of India. There is no doubt that the majority of parts for small radio sets could be more cheaply manufactured in this country than they can be imported and further such an industry would find the right kind of skilled labour already in India.

The Press.

The newspaper Press in India is an essentially English institution and was introduced soon after the task of organising the administration was seriously taken in hand by the English in Bengal. In 1773 was passed the Regulating Act creating the Governor-Generalship and the Supreme Court in Bengal and within seven years at the end of the same decade, the first newspaper was started in Calcutta by an Englishman in January 1780. Exactly a century and a third has elapsed since, not a very long period certainly, a period almost measured by the life of a single newspaper, *The Times*, which came into existence only five years later in 1785; but then the period of British supremacy is not much longer, having commenced at Plassey, only twenty-three years earlier. Bombay followed Calcutta closely, and Madras did not lag much behind. In 1789 the first Bombay newspaper appeared, *The Bombay Herald*, followed next year by *The Bombay Courier*, a paper now represented by *The Times of India* with which it was amalgamated in 1861. In Bombay the advent of the press may be said to have followed the British occupation of the island much later than was the case in Calcutta. In Calcutta the English were on sufferance before Plassey, but in Bombay they were absolute masters after 1665, and it is somewhat strange that no Englishman should have thought of starting a newspaper during all those hundred and twenty-five years before the actual advent of *The Herald*.

The first newspaper was called *The Bengal Gazette* which is better known from the name of its founder as *Hicky's Gazette* or *Journal*. Hicky like most pioneers had to suffer for his enterprising spirit, though the fault was entirely his own, as he made his paper a medium of publishing gross scandal, and he and his journal disappeared from public view in 1782. Several journals rapidly followed Hicky's, though they did not fortunately copy its bad example. *The Indian Gazette* had a career of over half a century, when in 1833 it was merged into the *Bengal Harkaru*, which came into existence only a little later, and both are now represented by *The Indian Daily News* with which they were amalgamated in 1866. No fewer than five papers followed in as many years, the *Bengal Gazette* of 1780, and one of these, *The Calcutta Gazette*, started in February 1784, under the avowed patronage of Government, flourishes still as the official gazette of the Bengal Government.

In 1821 a syndicate of European merchants and officials commenced the publication of *John Bull in the East*, a daily paper which was intended to reflect Tory opinion in India and set an example to the Press generally in the matter of moderation and restraint. The name of this journal was altered to *The Englishman* by the famous Stocqueler in 1836.

From its commencement the press was jealously watched by the authorities, who put serious restraints upon its independence and pursued a policy of discouragement and rigorous control. Government objected to news of apparently the most trivial character affecting its servants. From 1791 to 1799 several editors were deported to Europe without trial and on short notice, whilst several more were censured and had to apologise. At the commencement of the rule of Wellesley Government promulgated stringent rules for the public press and instituted an official censor to whom everything was to be submitted before publication, the penalty for offending against these rules to be immediate deportation. These regulations continued in force till the time of the Marquis of Hastings who in 1818 abolished the censorship and substituted milder rules.

This change proved beneficial to the status of the press, for henceforward self-respecting and able men began slowly but steadily to join the ranks of journalism, which had till then been considered a low profession. Silk Buckingham, one of the ablest and best known of Anglo-Indian journalists of those days availed himself of this comparative freedom to criticise the authorities, and under the short administration of Adam, a civilian who temporarily occupied Hastings' place, he was deported under rules specially passed. But Lord Amherst and still more Lord William Bentinck were persons of broad and liberal views, and under them the press was left practically free, though there existed certain regulations which were not enforced, though Lord Clare, who was Governor of Bombay from 1831 to 1835, once strongly but in vain urged the latter to enforce them. Metcalfe who succeeded for a brief period Bentinck, removed even these regulations, and brought about what is called the emancipation of the press in India in 1835, which was the beginning of a new era in the history of the Indian press. Among papers that came into being, was the *Bombay Times* which was started towards the close of 1838 by the leading merchants of Bombay, and which in 1861 changed its name to the *Times of India*. *The Bombay Gazette*, founded in 1791, ceased publication in 1914.

The liberal spirit in which Lord Hastings had begun to deal with the press led not only to the improvement in the tone and status of the Anglo-Indian press, but also to the rise of the Native or Indian Press. The first newspaper in any Indian language was the *Samachar Durpan* started by the famous Serampore Missionaries Ward, Carey and Marshman in 1818 in Bengali, and it received encouragement from Hastings who allowed it to circulate through the post office at one-fourth the usual rates. This was followed in 1822 by a purely native paper in Bombay called the *Bombay Samachar* which still exists, and thus was laid the foundation of the Native Indian Press which at the present day is by far th largest part of the press in India, numbering over 650 papers.

From 1835 to the Mutiny the press spread to other cities like Delhi, Agra, Gwalior, and even Lahore, whereas formerly it was chiefly confined to the Presidency towns. During

the Mutiny its freedom had to be temporarily controlled by the Gagging Act which Canning passed in June 1857 on account of the license of a very few papers, and owing still more to the fears of its circulating intelligence which might be prejudicial to public interests. The Act was passed only for a year at the end of which the press was once more free.

On India passing to the Crown in 1858, an era of prosperity and progress opened for the whole country in which the press participated. There were 19 Anglo-Indian papers at the beginning of this period in 1858 and 25 Native papers and the circulation of all was very small. The number of the former did not show a great rise in the next generation, but the rise in influence and also circulation was satisfactory. Famous journalists like Robert Knight, James Maclean and Hurris Mookerji flourished in this generation. The *Civil and Military Gazette* was originally published in Simla as a weekly paper, the first issue being dated June 22nd, 1872. Prior to and in the days of the Mutiny the most famous paper in Northern India was the *Mofussilite*, originally published at Meerut, but afterwards at Agra and then at Ambala. After a lively existence for a few years in Simla the *Civil and Military Gazette* acquired and incorporated the *Mofussilite*, and in 1876 the office of the paper was transferred from Simla to Lahore, and the *Gazette* began to be published daily.

INDIAN PRESS LAW.

Before 1835 all printing of books and papers was subject to licence by the Governor-General in Council, and the licences were issued or refused at the discretion of Government. Act XI of 1835 repealed the old Regulations and merely required registration of the printer and made a few minor requirements. That Act was replaced in 1867 by the present Press and Registration of Books Act, and, except for an Act which was in force for one year during the Mutiny, there was no further legislation directly affecting the Press until 1878 when the Vernacular Press Act was passed. That Act was repealed during the Viceroyalty of Lord Ripon in 1882. From that date until 1907 Government made no attempt to interfere directly with the liberty of the Press, the growth of sedition being dealt with in other ways by the passing in 1898 of section 124A of the Penal Code in its present form, which had been originally enacted in 1870, and by the introduction into the Penal Code of section 153A and into the Criminal Procedure Code of section 108. There were a certain number of prosecutions under those sections up to 1907, but the dissemination of sedition through the Press continued. In 1908 the Newspaper (Incitement to Offences) Act was passed which dealt with papers inciting to murder or to acts of violence. This Act failed to have the desired effect.

The Indian Press Act, 1910, was a measure of wider scope, the main object of which was to ensure that the Indian press generally should be kept within the limits of legitimate discussion.

The Act deals, not only with incitements to murder and acts of violence, but also with other specified classes of published matter, including any words or signs tending to seduce soldiers or sailors from their allegiance or duty, to bring into hatred or contempt the British Government, any Native Prince, or any section of His Majesty's subjects in India, or to intimidate public servants or private individuals.

The different sections of the Act have in view (i) Control over presses and means of publication; (ii) control over publishers of newspapers; (iii) control over the importation into British India and the transmission by the post of objectionable matter; (iv) the suppression of seditious or objectionable newspapers, books, or other documents wherever found.

Repeal of Press Legislation.—By the autumn of 1917 the Government of India had begun to consider the desirability of modifying at least one section of the Press Act to which great exception had been taken on account of the wide powers that it gave. Finally, after more than once consulting Local Government, a Committee was appointed in February 1921 after a debate in the Legislative Assembly, to examine the Press and Registration of Books Act, 1867, and the Indian Press Act, 1910, and report what modifications were required in the existing law. That Committee made an unanimous report in July 1921, recommending:—

(1) The Press Act should be repealed.

(2) The Newspapers Incitements to Offences Act should be repealed.

(3) The Press and Registration of Books Act and the Post Office Act should be amended where necessary to meet the conclusion noted below: (*a*) The name of the editor should be inscribed on every issue of a newspaper and the editor should be subject to the same liabilities as the printer and publisher, as regards criminal and civil responsibilities; (*b*) any person registering under the Press and Registration of Books Act should be a major as defined by the Indian Majority Act; (*c*) local Governments should retain the power of confiscating openly seditious leaflets, subject to the owner of the press or any other person aggrieved being able to protest before a court and challenge the seizure of such document, in which case the local Government ordering the confiscation should be called upon to prove the seditious character of the documents. The powers conferred by Sections 13 to 15 of the Press Act should be retained. Customs and Postal officers being empowered to seize seditious literature within the meaning of Section 124A of the I. P. C. subject to review on the part of the local Government and challenge by any persons interested in the courts; (*e*) any person challenging the orders of Government should do so in the local High Court; (*f*) the term of imprisonment prescribed in Sections 12, 13, 14 and 15 of the Press and Registration of Books Act should be reduced to six months; (*g*) the provisions of Section 16 of the Press Act should be reproduced in the Press and Registration of Books Act.

Effect was given to these recommendations during the year 1922

Press Association of India.—At the end of 1915 this Association was formed in Bombay. According to the articles of constitution "Its objects shall be to protect the press of the country by all lawful means from arbitrary laws and their administration, from all attempts of the Legislature to encroach on its liberty or of the executive authorities to interfere with the free exercise of their calling by journalists and press proprietors, and for all other purposes of mutual help and protection which may be deemed advisable from time to time." Members pay a minimum subscription of Rs. 10 annually. The affairs of the Association are managed by a Council.

Number of Printing Presses at Work, and Number of Newspapers, Periodicals, and Books Published.

Province.	Printing Presses.	News-papers.	Periodi-cals.	Books.	
				In English or other European Languages.	In Indian Languages (Vernacular and Classical) or in more than one Language.
Madras	(*a*)1,487	(*a*) 302	847	617	2,941
Bombay	933	341	(*b*)1,344	237	2,351
Bengal	1,138	239	422	663	2,667
United Provinces	792	203	290	258	2,518
Punjab	417	175	287	217	2,212
Burma	335	62	171	9	145
Bihar and Orissa	210	54	61	94	1,798
Central Provinces and Berar ..	(*b*) 170	54	37	16	166
Assam	55	18	26	2	31
North-West Frontier Province ..	21	....	5	5	7
Ajmer-Merwara (*c*	26	7	17	12	113
Coorg	6	2	2	....	....
Delhi	134	60	98	17	297
Total, 1926-27 ..	5,724	1,517	3,627	2,147	15,246
Totals .. 1925-26 ..	5,362	1,378	3,089	2,117	14,276
Totals .. 1924-25 ..	5,312	1,401	3,146	2,302	14,728
Totals .. 1923-24 ..	4,909	1,363	2,888	2,237	13,802
Totals .. 1922-23 ..	4,509	1,282	2,559	1,951	12,804
Totals .. 1921-22 ..	4,083	1,094	2,252	1,856	11,807
Totals .. 1920-21 ..	3,795	1,017	2,297	1,690	10,105
Totals .. 1919-20 ..	3,371	941	2,152	2,019	9,162
Totals .. 1918-19 ..	3,146	883	2,049	2,092	9,687
Totals .. 1917-18 ..	3,155	838	1,997	1,916	10,772

(*a*) Relate to the Calendar year 1927. (*b*) Includes 11 Presses which are reported not working.
(*c*) Relate to the Calendar year 1926.

Newspapers and News Agencies registered under the Press Rules and arranged alphabetically according to Station where they are published and situated.

NOTE.—*News Agencies are distinguished by an asterisk.*

Stations.	Title in full.	Day of going to Press.
Agra	Agra Akbbar	Wednesdays.
	Jain Path Pradarshak	....
	Navyug	Daily.
	Sanadhyap Karak	On the 3rd and 18th of every month.
Ahmedabad	Gujarati Punch	Sundays.
	Navajivan	Fridays.
	Political Bhomiyo	Thursdays.
	Praja Bandhu	Saturdays.
	Young India	Thursdays.
Akola, Berar	Praja Paksha	Saturdays.
Akyab	Arakan News	Tuesdays and Fridays.
Aligarh	Aligarh Institute Gazette	Wednesdays.
Allahabad	Abhyudaya	Fridays.
	Bhavishya	Weekdays.
	Democrat	....
	Hindustan Review	On first of every month.
	Leader	Daily, except Mondays.
	Navayug	Daily.
	Pioneer	Daily.
Allahabad Katra	Stri Dharam Shikshak	Monthly
Alleppey	Travancore Publicity Bureau	....
Amraot	Bharat	Wednesdays.
	Udaya	Mondays.
Amritsar	Akali te Pardesi	Daily except Sundays.
	Daily Vakil	Daily.
	Gurumukhi Daily Khalsa	Daily.
	Punjab Press Bureau	....
	Qaumi Dard	Daily.
	Tanzeem	Daily.
Amroha	Ittihad	Saturdays.
Asansol	Ratnakar	Sundays.
Bagalkot	Kannadiga	Thursdays.
	Navina Bharat	Tuesdays.
Bagerhat	Jagaran	Sundays.
Bangalore	Daily Post	Daily.
	Kasim-ul-Akhbar	Mondays and Thursdays.
	Truth	Mondays and Thursdays.
Barisal	Barisal Hitaishi	Sundays.

Stations.	Title in full.	Day of going to Press.
Baroda	Jagriti	Weekly.
	Shree Saya Vijaya	Thursdays.
Bassein, Burma	Bassein News	Tuesdays and Fridays.
Belgaum	Belgaum Samachar	Mondays.
Benares City	Aj	Daily.
	Awazai Khalk	Every Wednesday
	Bharat Jiwan	Sundays.
	Hindi Kesari	Thursdays.
	Kashi Temperance Samachar	Monthly.
	Mahamandal Magazine	Monthly.
	Trishul	Monthly.
	Varnasrama	On Mondays and Fridays
Bhavnagar	Daily Market Report	....
	Jain	Saturdays.
	Jainhasan	Tuesdays.
	Market News	Daily, except Sundays.
Bhiwani	Sandesh	Sundays.
Bijapur	Karnatak Vaibhav	Saturdays.
Bombay	Akhbar-i-Islam and Akhbar-i-Soudagar	Daily, except on Sundays.
	Bombay Chronicle	Daily.
	Bombay Samachar	Daily.
	Breul Co.'s Market Report	Daily, except Sundays.
	Catholic Examiner	Saturdays.
	Commercial Sporting News	....
	Dnyana Prakash	Daily, except Mondays.
	Evening News of India	Daily.
	Goan World	Monthly.
	Gujarati	Saturdays.
	Gujarati Kesari	Wednesdays.
	Indian Daily Mail	Daily.
	Indian Industries and Power	On the 15th of each month.
	Indian National Herald	Daily.
	Indian Social Reformer	Saturdays.
	Ismaili	Every Saturday.
	Jam-e-Jamshed	Daily, except Sundays.
	Kaiser-i-Hind	Sundays.
	Kashshaf	Every Friday.
	Khilafat Daily	......
	Khilafat Bulletin	Saturdays.

Stations.	Title in full.	Day of going to Press.
Bombay—*contd.*	Mufide Rozgar	Sundays.
	Muslim Herald	Daily.
	Nawa Kal	Daily, except Mondays.
	Nyayadarshak	Thursdays.
	Nusrat	Daily.
	O Amigo do Goano	Fridays.
	O Anglo-Lusitano	Saturdays.
	Parsi & Praja Mitra & Hindustan	Daily, except Sunday.
	Railway Times	Fridays.
	Rushimukh	1st week of every month (according to Hindu Calendar).
	Sandesh	Daily.
	Sanj Vartaman	Daily, except Sundays.
	Shri Venkateshwar Samachar	Fridays.
	Times of India	Daily.
	Illustrated Weekly of India.	Sundays.
	Wahdat	Daily.
	Young Messenger of India	Monthly.
Bowringpet	Kolar Gold Fields News	Tuesdays.
Budaon	Akhbar Zulqarnain	6th, 13th, 20th and 27th of every month.
Calangute (Goa)	A Voz do Povo	Saturdays.
Calcutta	Alkamal	Daily.
	Amrita Bazar Patrika	Daily.
	Ananda Bazar Patrika	Daily, except Sundays.
	Asrijadid	Daily.
	Bangabasi	Wednesdays.
	Basumati	Daily.
	Bengalee	Daily, except Sundays.
	Bhagavan Gandhi	Mondays.
	Bharata Mitra	Thursdays.
	Business World	Monthly.
	Capital	Thursdays.
	Collegian	Bi-monthly.
	Commerce	Wednesdays.
	Commercial News	On the 10th of each month.
	Dowejadid	Daily.

Stations.	Title in full.	Day of going to Press.
Calcutta—*contd.*	Englishman	Daily.
	Forward	Daily.
	Gandiya	Every Friday.
	Guardian	Fridays.
	Hindu Patriot	Daily, except Saturdays.
	Hindusthan	Daily, except Sundays.
	Hitabadi	Wednesdays.
	Indian and Eastern Engineer ..	14th of each month.
	Indian Engineering	Thursdays.
	Indian Mirror	Daily.
	Indian News Agency	......
	Industry	Monthly
	Inqilab-i-Zamana	Daily, except Sundays.
	Jain Gazette	Saturdays.
	Liberty	Daily, except Sundays.
	Maheshwari	Every Monday.
	Market Intelligence	Daily.
	Muslim Standard	Tri-weekly.
	Mussalman	Thursdays.
	Nayak	Daily.
	Planters' Journal and Agriculturist.	Saturdays.
	Prakash	Daily.
	Rayat Bhandu	Sundays.
	Sanjibani	Wednesdays.
	Samay	Wednesdays.
	Samyavadi	Daily.
	Servant	Daily.
	Statesman	Daily.
	Sultan	Every Wednesday.
	Swatantra	Daily.
	Swaraj	Daily, except Mondays.
	Telegraph	......
	United Press Syndicate *	......
	Vishwamitra	Daily.
	Vyapar	Daily.
	Young Men of India	Monthly.
	World Peace	Wednesdays.
Calicut	Alameen	On Mondays, Wednesdays and Saturdays.
	Kerala Sanchari	Wednesdays.
	Manorama	Tuesdays and Fridays.
	Mathrubhumi	On Mondays, Wednesdays and Thursdays.
	Mitavadi	Daily.
	West Coast Reformer	Sundays and Thursdays.
	West Coast Spectator	Wednesdays and Saturdays.

Stations.	Title in full.	Day of going to Press.
Cawnpore	Azad	Wednesdays.
	Cawnpore Journal	Daily.
	Daily Vartaman	......
	Hurriat	Daily, except Sundays
	Prabha	Monthly.
	Pratap, Hindi Daily and Weekly Paper.	Saturdays.
	Reuter's Telegram Company, Limited.	......
	Zamana	25th day of every month.
Chandernagore	Probartak	Bi-monthly.
Chindwara	Lokmitra	Saturdays.
Chinsurah	Education Gazette	Tuesdays.
Chittagong	Jyoti	Wednesdays.
Cochin	Cochin Argus	Saturdays.
	Cochin News Agency	......
	Malabar Herald	Saturdays.
Cochin Mattancherry	Malabar Islam	....
Cocanada	Ravi	Thursdays
Colombo	Ceylon Catholic Messenger	Tuesdays and Fridays.
	Ceylon Daily News	Daily.
	Ceylonese	Daily.
	Ceylon Independent	Daily.
	Ceylon Morning Leader	Daily.
	Ceylon Observer	Daily.
	Dinakara Prakasa	Mondays, Tuesdays, Thursdays and Saturdays.
	Dinamina	Daily, except Sundays.
	Dravida Mitran	Wednesdays and Saturdays.
	Gnanartha Pradipaya	Mondays and Thursdays.
	Islam Mittiran	Wednesdays and Saturdays.
	Lakmina	Daily, except Sundays.
	People	Daily.
	Sarasavi Sandaresa	Tuesdays and Fridays.
	Times of Ceylon	Daily.
Contai	Nihar	Mondays.
Cuttack	Utkal Deepica	Fridays.
	Indian Sunday School Journal	Monthly
Dacca	Dacca Gazette	Mondays.
	Dacca Prakash	Sundays.

Stations.	Title in full.	Day of going to Press.
Darjeeling	Darjeeling Times and Planters' Gazette.	Tuesdays
Delhi	Alaman	Daily.
	Arjun	Daily.
	Asia	Daily.
	Comrade	Wednesdays.
	Daily Hamdard	Daily, except Fridays.
	Edwin Haward*	....
	General News Agency and Book Depot.	Daily.
	General News Bilimaran	......
	Hindu Sansar	Weekdays.
	Hindustan Times	Daily.
	Indian News Agency	......
	Maheswari (Hindi)	Weekly.
	Mail Trading	Monthly.
	National News Agency	......
	Quam	Weekly.
	Rajasthan	Tuesdays.
	Riyasat	Thursdays.
	Sabha	Daily.
	Swarajya	Daily.
	Tej	Daily.
	Tamadun	Monthly.
	Vijaya	Saturdays.
	Weekly Hindi Paper	......
	Weekly Moballig	......
	Weekly Bharat Sewak	Saturdays.
Dharwar	Dharwarvritt	Wednesdays.
	Karnatakavritta and Dhananjaya	Tuesdays.
	Karm Veer	Fridays.
	Raja Hansa	Daily.
	Vijayia	Daily.
Dhulia	Khandesh Vaibhav	Fridays
	Prabodh	Saturdays
Dibrugarh	Times of Assam	Fridays.
Gauhati	Assamiya	Saturdays.
Gorakhpur...	Swadesh	Saturdays.
Guntur	Deshabhimani	Daily.
Howrah	Bisva Duta..	Daily.
Hyderabad, Deccan	Musheer-i-Deccan	Daily.
	Sahifa-i-Rozana	Daily.
	Usman Gazette	Daily.
Hyderabad, Sind ..	Bharatvasi	Daily.
	Hindu	Daily.
	Musafir	Saturdays.
	Prakash	Daily, except Sundays.
	Sind Journal	Wednesdays.
	Sind Mail	Daily.
	Sindvasi	Daily.

Stations.	Title in full.	Day of going to Press.
Jaffna	Ceylon Patriot and Weekly Advertiser.	Tuesdays.
	Jaffna Catholic Guardian.. ..	Saturday Mornings.
	Sithia Veda Pathukavalan ..	Fortnightly.
	Vasavilan Jaffna Native Opinion	Fortnightly.
Jaffna (Vannarponnai) ..	Hindu Organ	Wednesdays.
Jalgaon (Khandesh) ..	Pragatik	Weekly.
Jaramoala	Daily Beopar Patar	Daily.
Jhansi	Free India	Fridays.
	Sahas	Sundays.
Jhansi City..	Nyaya	Wednesdays.
Jubbulpore	India Sunday School Journal ..	Third Thursday of every month.
	Karmaveer	Fridays.
Karachi	Alwahid	Daily, except Sundays.
	Bharat	Daily.
	Chowkidar	Fridays.
	Daily Gazette	Daily.
	Kesari	Daily, except Sundays.
	New Times	Daily.
	Parsi Sansar	Saturdays.
	Rozana Biupar	Daily.
	Rozana Samachar..	Daily.
	Sind Observer	Wednesdays and Saturdays.
	Sind Sudhar	Saturdays.
	Weekly Memon Samachar ..	Thursdays.
Karai Kudi ..	Dhana Vysia Ootran	Fridays.
	Kumaran	Wednesday.
Khulna	Khulna Basi	Thursdays.
Kolhapur City	Vidyavilas	Fridays.
Kottayam	Kerala Varathi	Tuesdays and Fridays.
	Malayala Manorama	Wednesdays and Saturdays.
	Malayalam Daily News ..	Daily.
	Nazrani Deepika	Tuesdays, Thursdays and Saturdays.
	Powraprabha	Tuesdays and Fridays.
Kumta	Kanara News	Thursday.
	Kanara Leader	Thursday.
Lahore	Akali	Daily.
	Akhbar-i-Am	Daily.
	Bande Mataram	Daily, except Sundays.
	Civil and Military Gazette ..	Daily (Sundays excepted).
	Congress Publicity Bureau .	....
	Daily Karamvir	Daily, except Tuesdays.
	Daily Milap	....
	Daily Updeshak	....
	Daily Urdu Iltifag	....
	Daily Zamindar	....
	Desh	Daily.
	Darpan	Daily.

Stations.	Title in full.	Day of going to Press.
Lahore—*contd.* ..	Haq	Fridays.
	Kesari	Daily, except Sundays.
	Muslim Outlook	Daily.
	Paigham-i-Sulah	Sundays and Wednesdays.
	Panth	Daily, except Sundays.
	Pratap	Daily.
	Rajput Gazette	1st, 8th, 16th and 24th of every month.
	Scientific World	Monthly.
	Siyasat	Daily, except Sundays.
	Sudarshan	Mondays.
	Sunday Times	Sundays.
	The People	Saturdays.
	Tribune	Daily, except Sundays.
	N. W. Railway Union Gazette ..	Weekly.
	Watan	Thursdays.
Larkana	Khairkhah	Saturdays.
	Larkana Gazette	Fridays.
Lucknow	Advocate	Wednesdays and Saturdays.
	Anand	Thursdays.
	Daily Hamdam	Daily.
	Haqiqat	Daily.
	Hindusthani	Bi-weekly.
	Indian Daily Telegraph	Daily.
	Indian Witness	Wednesdays.
	Kaukab-i-Hind	Wednesdays.
	Lucknow Times	Daily.
	Muslim Gazette	Tuesdays.
	Oudh Akhbar	Daily, except Sundays.
	Patriot	Every Saturday.
	The Huque..	Daily.
Lyallpur	Daily Commercial News	Daily.
	Daily Market Report	Daily.
Madras	Al-Mazmun	On the first of every month.
	Andhra Patrika	Tuesdays.
	Anglo-Indian	Thursdays.
	Azadhind	Daily.
	Catholic Leader	Wednesdays.
	Christian Patriot	Saturdays.
	Daily Express	Daily, except Sunday and Monday mornings.
	Desabhakatan	Daily.
	Jnana Jothi	....
	Hindu	Daily.
	Indian Railway Journal	15th of every month.
	Indian Review	Monthly.
	Janararthamani	Weekdays.
	Jarida-i-Rozgar	Saturdays.
	Justice	Daily.
	Law Times	Saturdays.
	Madras Mail	Daily.

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Jaffna (Vannarponnai)	Hindu Organ	Wednesdays.
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Jaramoala	Daily Beopar Patar	Daily.
Jhansi	Free India	Fridays.
	Sahas	Sundays.
Jhansi City	Nyaya	Wednesdays.
Jubbulpore	India Sunday School Journal	Third Thursday of every month.
	Karmaveer	Fridays.
Karachi	Alwahid	Daily, except Sundays.
	Bharat	Daily.
	Chowkidar	Fridays.
	Daily Gazette	Daily.
	Kesari	Daily, except Sundays.
	New Times	Daily.
	Parsi Sansar	Saturdays.
	Rozana Biupar	Daily.
	Rozana Samachar	Daily.
	Sind Observer	Wednesdays and Saturdays.
	Sind Sudhar	Saturdays.
	Weekly Memon Samachar	Thursdays.
Karai Kudi	Dhana Vysia Ootran	Fridays.
	Kumaran	Wednesday.
Khulna	Khulna Basi	Thursdays.
Kolhapur City	Vidyavilas	Fridays.
Kottayam	Kerala Varathi	Tuesdays and Fridays.
	Malayala Manorama	Wednesdays and Saturdays.
	Malayalam Daily News	Daily.
	Nazrani Deepika	Tuesdays, Thursdays and Saturdays.
	Powraprabha	Tuesdays and Fridays.
Kumta	Kanara News	Thursday.
	Kanara Leader	Thursday.
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	Akhbar-i-Am	Daily.
	Bande Mataram	Daily, except Sundays.
	Civil and Military Gazette	Daily (Sundays excepted).
	Congress Publicity Bureau	....
	Daily Karamvir	Daily, except Tuesdays.
	Daily Milap	....
	Daily Updeshak	....
	Daily Urdu Iltifaq	....
	Daily Zamindar	....
	Desh	Daily.
	Darpan	Daily.

Stations.	Title in full.	Day of going to Press.
Lahore—*contd.*	Haq	Fridays.
	Kesari	Daily, except Sundays.
	Muslim Outlook	Daily.
	Paigham-i-Sulah	Sundays and Wednesdays.
	Panth	Daily, except Sundays.
	Pratap	Daily.
	Rajput Gazette	1st, 8th, 16th and 24th of every month.
	Scientific World	Monthly.
	Siyasat	Daily, except Sundays.
	Sudarshan	Mondays.
	Sunday Times	Sundays.
	The People	Saturdays.
	Tribune	Daily, except Sundays.
	N. W. Railway Union Gazette	Weekly.
	Watan	Thursdays.
Larkana	Khairkhah	Saturdays.
	Larkana Gazette	Fridays.
Lucknow	Advocate	Wednesdays and Saturdays.
	Anand	Thursdays.
	Daily Hamdam	Daily.
	Haqiqat	Daily.
	Hindusthani	Bi-weekly.
	Indian Daily Telegraph	Daily.
	Indian Witness	Wednesdays.
	Kaukab-i-Hind	Wednesdays.
	Lucknow Times	Daily.
	Muslim Gazette	Tuesdays.
	Oudh Akhbar	Daily, except Sundays.
	Patriot	Every Saturday.
	The Huque	Daily.
Lyallpur	Daily Commercial News	Daily.
	Daily Market Report	Daily.
Madras	Al-Mazmun	On the first of every month.
	Andhra Patrika	Tuesdays.
	Anglo-Indian	Thursdays.
	Azadhind	Daily.
	Catholic Leader	Wednesdays.
	Christian Patriot	Saturdays.
	Daily Express	Daily, except Sunday and Monday mornings.
	Desabhakatan	Daily.
	Jnana Jothi	....
	Hindu	Daily.
	Indian Railway Journal	15th of every month.
	Indian Review	Monthly.
	Janararthamani	Weekdays.
	Jarida-i-Rozgar	Saturdays.
	Justice	Daily.
	Law Times	Saturdays.
	Madras Mail	Daily.

Stations.	Title in full.	Day of going to Press.
Madras—*contd.*	Muhammadan	Mondays and Thursdays.
	Mukhbir-i-Deccan	Wednesdays.
	Nyayadipika	Daily.
	New India	Daily.
	Shamshul Akhbar	Mondays.
	Swadesa Mitran	Daily.
	Swarajya	Daily.
	To-day	Daily.
Madura	South Indian Mail	Mondays.
Mandalay	Upper Burma Gazette	Daily.
Margao (Goa)	A Terra	Wednesdays and Saturdays.
	Noticias	Mondays.
	Ultramar	Mondays and Fridays.
Mattancheri	Chakravarthi	Saturdays.
Meerut	Roznama Qaum	Daily.
Mhow	Satyarth Patrika	Thursdays.
Mirpurkhas	Mirpurkhas Gazette	Wednesdays.
Mirpur City	Khichri Samachar	Saturdays.
Moulmein	Moulmein Advertiser	Daily.
Mount Road, Madras	Hindu	Daily, except Sundays.
Mussoorie	Mussoorie Times	Thursdays.
Muttra	Jain Gazette	Mondays.
Muvattupuzha	Kerala Dheepika	Saturdays.
Muzaffarnagar	Weekly Sewak	Weekly.
Mymensingh	Charu Mihir	Tuesdays.
Mysore	Sadhvi	Thursdays.
	Sampadabhyudaya	Daily, except Sundays.
	Wealth of Mysore	Do.
Nagercoil	Travancore Times	Tuesdays.
Nagpur	Desha-Sewak	Mondays.
	Hitavada	Wednesdays.
	Maharashtra	Tuesdays.
	Khabbar	Daily.
	Marwadi	Tuesdays.
	Pranavir	Mondays and Thursdays.
	Samaj Sewak	Mondays.
	Sankalpa	Daily.
	Sankalpa Mahal	Fridays.
	Swatantrya	Daily, except Mondays.
	Young Patriot	Sundays.
Naini Tal	Naini Tal Gazette	Wednesdays.
Nasik	Loksatta	Saturdays.
Naushahro	Shakti	Mondays.
Nova Goa	Diario de Noite	Daily.
	Heraldo	Daily, except Mondays.
	O'Debate	Mondays.
	O'Heraldo	Daily, except Sundays and holidays.
Ootacamund	South of India Observer and Nilgiri News.	Daily issue, except Sundays.
	Nilgiri Times	Wednesdays.

Stations.	Title in full.	Day of going to Press.
Orai	Utsah	Thursdays.
Pandharpur	Pandhari Mitra	Sundays.
Pangsa	Kangal	Fridays.
Panjim, Goa	O'Crente	Saturdays.
Parur	Uttara Tharaka	Saturdays.
Patna	Behar Herald	Saturdays.
	Express	Daily.
	Searchlight	Saturdays.
Pen	Kolaba Samachar	Fridays.
Poona	Deccan Herald	Daily.
	Dnyana Prakash	Daily, except Mondays.
	Kesari	Tuesdays.
	Mahratta	Sundays.
	War Cry	Monthly.
Poona City	Satyagrahee	Bi-weekly.
	Servant of India	Weekly.
Quadian (*via* Batala) ..	Alfazal	Bi-weekly.
	Alhakam	Weekly.
	Alfarooq	Weekly.
	Nur	Fortnightly.
	Review of Religions (in English.)	Monthly.
	Do. (in Urdu) ..	Monthly.
Quetta	Baluchistan Gazette	Wednesdays and Saturdays.
	Baluchistan Herald Daily Bulletin.	Daily.
Quilon	Desabhimani	......
	Malayali	Wednesdays and Saturdays.
Rajkot	Kathiawar Opinion	Bi-weekly.
	Kathiawar Times	Wednesdays and Sundays.
	Lohana Hitechhu	Wednesdays.
Rampur (Kathiawar) ..	Saurashtra	Daily.
Rangoon	Burma Sunday Times	Sundays.
	Burma Exchange Gazette and Daily Advertiser.	Daily.
	Chinese Daily News	......
	Free Burma	Daily.
	New Burma	Tri-weekly.
	New Light of Burma	Daily, except Mondays.
	Rangoon Daily News	Thursdays.
	Rangoon Evening Post	Week-days.
	Rangoon Gazette	Daily, except Mondays.
	Rangoon Times	Daily, except Sundays.
	Rangoon Mail	Saturdays.
	The Sun	Daily, except Sundays.
Ratnagiri	Bakool	Saturdays.
	Balvant	Tuesdays.
	Satya Shodhak	Sundays.

Stations.	Title in full.	Day of going to Press.
Rawalpindi..	Daily Prem..	Daily.
	Frontier Bulletin..	Saturdays.
	Shanti	Daily.
Samastipur..	Vigilant	Saturdays.
Satara	Shubha Suchaka	Fridays.
Satara City..	Prakash	Wednesdays.
Secunderabad	Hyderabad Bulletin	Daily.
	Notice Sheet	Daily.
Shahjahanpur	Sarpunch	Daily.
Sholapur	Kalpataru	Sundays.
	Karmayogi	Thursdays.
	Sholapur Samachar	Tuesdays.
Silchar	Navajug	Monthly.
	Surma	Sundays.
Simla	Sunday Times Simla Edition	Mondays.
Sukkur	Sindhi	Saturdays.
Surat	Deshbandhu	Daily, except Sundays.
	Deshi Mitra	Thursdays.
	Deshodaya	Tuesdays.
	Gujrat Mittra and Gujarat Darpan	Saturdays.
	Jain Mitra	Wednesdays.
	Navayuga Weekly..	......
	Peoples' Business Gifts	Monthly.
	Praja Pokar	Wednesdays.
	Samachar	Daily, except Mondays.
	Surat Akhbar	Sundays.
Sylhet	Paridarsaka	Wednesdays.
Tinnevelly	Kalpaka	Monthly.
Trichinopoly	Wednesday Review	Wednesdays.
Trichur	Lokaprakasam	Mondays.
Tirupur	Commercial News..	Daily, except Sundays.
Tiruvalla	Kerala Kahalam	Wednesdays.
	Kerala Taraka	Wednesdays.
Trivandrum	Bharata Kesari	Bi-weekly.
	Samadarsi	Tuesdays, Thursdays and Saturdays
	Travancore Press Service..	......
	Trivandrum Daily News..	Daily.
	Western Star	Tuesdays, Thursdays and Saturdays.
Udipi	Satyagrahi..	Thursdays.
Vizagapatam	Andhra Advocate..	Fridays.
Wai	Modavritta	Mondays.
	Vrittasar	Mondays.
Wardha	Maharashtra Dharma	Tuesdays.
	Rajasthan Kesari..	Saturdays.
Yeotmal	Lokamat	Thursdays.

Banking.

An event of great importance in the history of Indian banking was the formation on the 27th January 1921 of the Imperial Bank of India by amalgamation of the three Presidency Banks of Bengal, Bombay and Madras.

The idea of a Central Banking establishment for British India was mooted as early as 1836, and was the subject of a minute by Mr. James Wilson, when Finance Member, in 1859. Again, in 1867 Mr. Dickson, the well-known Secretary of the Bank of Bengal, submitted detailed proposals for an amalgamation of the three Presidency Banks. On various later occasions the matter was brought forward without result and it was discussed by the Chamberlain Commission on Indian Finance and Currency in 1913. The present scheme which has come to fruition was however the result of a *rapprochement* on the part of the Banks themselves as a result of the experience gained during the war and the realisation of the desirability of strengthening and extending the Banking system in India.

The Presidency Banks:—The history of the Presidency Banks in their relationship with Government falls into three well-defined stages. Prior to 1862 the Presidency Banks had the right of note issue, but were directly controlled by Government and the scope of their business was restricted by their charters. The second period was from 1862 to 1876. In 1862 the Banks were deprived of the right of note issue, though by their agreements of that year they were authorised to transact the paper currency business as agents of Government. As compensation for the loss of their right of issue, they were given the use of the Government balances and the management of the treasury work at the Presidency towns and at their branches. The old statutory limitations on their business were at the same time greatly relaxed, though the Government's power of control remained unchanged. In 1866 the agreements were revised and the paper currency business was removed from their control and placed under the direct management of Government. The third period dates from the Presidency Banks Act of 1876 by which nearly all the most important limitations of the earlier period were reimposed. Put very briefly, the principal restrictions imposed by this Act prohibited the Banks from conducting foreign exchange business, from borrowing or receiving deposits payable out of India, and from lending for a longer period than six months, or upon mortgage or on the security of immovable property or upon promissory notes bearing less than two independent names or upon goods, unless the goods of the title to them were deposited with the Bank as security. At the same time Government abandoned direct interference in the management, ceasing to appoint official directors and disposing of their shares in the Banks. The Banks no longer enjoyed the full use of the Government balances. Reserve Treasuries were constituted at the Presidency towns into which the surplus revenues were drawn and the balances left at the disposal of the Banks were strictly limited.

This system continued with only minor modifications until 1920. During the war, however, the policy was deliberately adopted of reducing the amount of the balances held in the Reserve Treasuries and leaving much larger balances with the Headquarters of the Presidency Banks in order to assist the money market.

The Imperial Bank:—Under the Imperial Bank of India Act (XLVII of 1920), the control of the Bank is entrusted to a Central Board of Governors with Local Boards at Calcutta, Bombay and Madras and such other places as the Central Board, with the previous sanction of the Governor-General in Council may determine. The Central Board of Governors consists of—

(*a*) Managing Governors not exceeding two in number, appointed by the Governor-General in Council on recommendation by the Central Board;

(*b*) the Presidents, Vice-Presidents and Secretaries of the Local Boards;

(*c*) the Controller of the Currency, or other officer nominated by the Governor-General in Council; and

(*d*) not more than four non-officials, nominated by the Governor-General in Council.

Representatives of any new Local Boards, which may be constituted, may be added at the discretion of the Central Board.

The Controller of the Currency and the Secretaries of the Local Boards are entitled to attend the meetings of the Central Board but not to vote under the agreement with Government. The Governor-General in Council is entitled to issue instructions to the Bank in respect of any matter which in his opinion vitally affects his financial policy or the safety of the Government balances, and if the Controller of the Currency or such other officer of Government as may be nominated by the Governor-General in Council to be a Governor of the Central Board shall give notice in writing to the Managing Governors that he considers that any action proposed to be taken by the Bank will be detrimental to the Government as affecting the matters aforesaid, such action shall not be taken without the approval in writing of the Governor-General in Council. Under the Imperial Bank of India Act provision was made for the increase of the capital of the Bank. The capital of the three Presidency Banks consisted of 3¾ crores of rupees in shares of Rs. 500 each, fully subscribed. The additional capital authorised was 7½ crores in shares of Rs. 500 each, of which Rs. 125 has been called up, making the present capital of the Bank Rs. 11¼ crores, of which Rs. 5,62,50,000 has been paid up. The Reerve Fund of the Bank is Rs. 5,17,50,000 and the Balance Sheet of 30th June 1928 showed the Government Balance at Rs. 7,96,57,353, other deposits at Rs. 73,31,10,612 and Cash Rs. 13,77,67,212, with a percentage of Cash to liabilities of 16,858.

Class of Business:—The Imperial Bank of India Act follows the Presidency Banks Act of 1876 in defining absolutely the class of business

in which the Bank may engage, though the older limitations are modified in some minor points. It permits for the first time the constitution of a London Office and the borrowing of money in England for the purpose of the Bank's business upon the security of assets of the Bank, but not the opening of cash credits, keeping cash accounts or receiving deposits in London except from former customers of the Presidency Banks. The Act provides for an agreement between the Bank and the Secretary of State, and this agreement, which was signed on the 27th January 1921 and is for a period of ten years determinable thereafter by either party with one year's notice, provides, *inter alia*, for the ollowing important matters:—

(1) All the general banking business of the Government of India is to be carried out by the Imperial Bank.

(2) The Bank will hold all the Treasury Balances at Headquarters and at its branches. This involves the abolition of the Reserve Treasury system.

(3) Within five years the Bank undertakes to open 100 new branches of which the Government of India may determine the location of one in four. The branches and agencies of the three Presidency Banks prior to the date of amalgamation numbered 69, including the Colombo branch of the Bank of Madras. The Bank of Bengal had no branches prior to the proposal to transfer Government business to the Bank in 1861-62 but no less than 18 branches were established before 1868.

(4) The management of the Public Debt will continue to be conducted by the Bank for specified remuneration.

THE DIRECTORATE.

Managing Governors .. .. .. { Sir N. M. Murray, Kt. / Sir Osborne Smith, Kt.

Presidents, Vice-Presidents and Secretaries of the Local Boards.

CALCUTTA—

E. C. Benthall, Esquire	President.
B. E. G. Eddis, Esquire	Vice-President.
K. M. Macdonald, Esquire, M.C.	Secretary.

BOMBAY—

E. J. Bunbury, Esquire	President.
Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., M.L.A.	Vice-President.
J. G. Ridland, Esquire	Secretary.

MADRAS—

Sir James F. Simpson, Kt.	President.
W. O. Wright, Esquire	Vice-President.
W. Lamb, Esquire	Secretary.

Controller of Currency .. .. .. H. Denning, Esquire, C.I.E., I.C.S.

Nominated by Government.

The Hon'ble Sir Maneckji B. Dadabhoy, K.C.I.E., Nagpur.
The Hon'ble Sir Dinshaw E. Wacha, Kt., J.P., Bombay.
Sir Rajendra Nath Mookerjee, K.C.I.E., K.C.V.O., Calcutta.
Sirdar Bahadur Sir Sundar Singh Majithia, Kt., C.I.E., Amritsar.

MANAGER IN LONDON
Sir Sidney Sitwell, Kt.

BRANCHES.

Burra Bazaar, Calcutta.
Clive Street, Calcutta.
Park Street, Calcutta.
Byculla, Bombay.
Mandvi, Bombay.
Sandhurst Road, Bombay.
Mount Road, Madras
Abbottabad.
Adoni (Sub-Agency)
Agra.
Ahmedabad.
Ahmedabad City.
Ahmednagar.
Ajmer.
Akola.
Akyab.
Aligarh.
Allahabad.
Alleppey.
Ambala.
Ambala Cant.
Amraoti.
Amritsar.
Asansol.
Bangalore.
Bareilly.
Bassein.
Bellary.
Benares.
Berhampore (Ganjam).
Bezwada.
Bhagalpur.
Bhopal.
Broach.
Bulandshahr.
Calicut.
Cawnpore.
Chandpore.
Chapra.
Chittagong.
Cocanada.
Cochin.
Coimbatore.
Colombo.
Conjeevaram (Sub-Agency).
Cuddalore.
Cuddapah.
Cuttack.
Dacca.
Darbhanga.
Darjeeling.
Dehra Dun.
Delhi.
Dhanbad.
Dhulia.
Dibrugarh.
Ellore.
Erode.
Etawah.
Farrukhabad
Ferozepore.
Fyzabad.
Gaya.

Godhra.
Gojra.
Gorakhpur.
Gujranwala.
Guntur.
Gwalior.
Hathras.
Howrah.
Hubli.

Hyderabad (Deccan).
Hyderabad (Sind).
Indore.
Jaipur.
Jalgaon.
Jalna,.
Jalpaiguri.
Jamshedpur.
Jhansi.

Jodhpur.
Jubbulpore.
Jullundur City.
Karachi.
Kasur.
Katni.
Khamgaon.
Khandwa.
Kumbakonam.

Lahore.
Larkana.
Lucknow.
Ludhiana.
Lyallpur.
Madura.
Mandalay.
Mangalore.

Masulipatam.
Meerut.
Mirzapore.
Montgomery.
Moradabad.
Moulmein.
Multan.
Murree.
Mussoorie.

Muttra.
Muzaffarnagar.
Muzaffarpur.
Myingyan.
Mymensingh.
Nadiad.
Nagpur.
Naini Tal.
Nanded (Sub-Agency).

Nandyal.
Naraingunge.
Nasik.
Negapatam
Nellore.
New Delhi.
Nowshera.
Ootacamund.
Patna.

Peshawar.
Peshawar City (Sub-Agency).
Poona.
Poona City.
Porbandar
Purnea.
Quetta.
Raichur.

Raipur.
Rajahmundry.
Rajkot.
Rangoon.
Rangpur.
Rawalpindi.
Saharanpur.

Salem.
Sargodha.
Secunderabad.
Serajgunge.
Shillong.
Sholapur.
Sialkot.

Simla.
Sitapur.
Srinagar (Kashmir).
Sukkur.
Surat.
Surat City.
Tellicherry.

Tinnevelly.
Tirupur.
Trichinopoly.
Trichur.
Trivandrum.
Tuticorin.
Ujjain.

Vellore.
Viramgaum,
Vizagapatam.
Vizianagram.
Wardha.
Yeotmal.

In Schedule 1, Part 1, of the Act, the various descriptions of business which the Bank may transact are laid down, and in Part 2 it is expressly provided that the Bank shall not transact any kind of banking business other than that sanctioned in Part 1.

Briefly stated, the main classes of business sanctioned are :—

(1) Advancing money upon the security of :—

(*a*) Stocks, &c., in which a trustee is authorised by Act to invest trust monies.

(*b*) Securities issued by State aided Railways, notified by the Governor-General-in-Council.

(*c*) Debentures, or other securities issued under Act, by, or on behalf of, a District Board.

(*d*) Goods, or documents of title thereto, deposited with, or assigned to the Bank.

(*e*) Accepted Bills of Exchange or Pro. Notes.

(*f*) Fully paid shares and debentures of Companies with limited liability or immoveable property or documents of title relating thereto, as collateral security where the original security is one of those specified in *a*, *b*, *c*, *d* and, if authorised by the Central Board, in *e*.

(2) With the sanction of the Local Government, advancing money to Courts of Wards upon security of estates in their charge.

(3) Drawing, accepting, discounting, buying and selling bills of exchange and other negotiable securities payable in India and Ceylon and, subject to the directions of the Governor-General in Council, the discounting, buying and selling of bills of exchange payable outside India for and from or to such Banks as may be approved.

(4) Investing the Banks' funds in the securities referred to in (1) *a*, *b*, *c*.

(5) Making Bank Post Bills and Letters of Credit payable in India and Ceylon.

(6) Buying and selling gold and silver.

(7) Receiving deposits.

(8) Receiving securities for safe custody.

(9) Selling such properties as may come into the Bank's possession in satisfaction of claims.

(10) Transacting agency business on commission.

(11) Acting as Administrator, for winding up estates.

(12) Drawing bills of exchange and granting letters of credit payable out of India for the use of principles in connection with (11) and also for private constituents for *bona fide* personal needs.

(13) Buying, for the purpose of meeting such bills, &c., bills of exchange payable out of India at any usance not exceeding six months.

(14) Borrowing money in India.

(15) Borrowing money in England upon security of assets of the Bank, but not otherwise.

The principal restrictions placed on the business of the Bank in Part 2 are as follows :—

(1) It shall not make any loan or advance :—

(*a*) For a longer period than six months;
(*b*) upon the security of stock or shares of the Bank;
(*c*) save in the case of estates specified in Part 1 (Courts of Ward) upon mortgage or security of immoveable property or documents of title thereof.

(2) The amount which may be advanced to any individual or partnership is limited.

(3) Discounts cannot be made or advances on personal security given, unless such discounts or advances carry with them the several responsibilities of at least two persons or firms unconnected with each other in general partnership.

The Balance Sheet of the Bank as at 30th June 1928 was as follows :—

LIABILITIES.	Rs.	a.	p.	ASSETS.	Rs.	a.	p.
Subscribed Capital ..	11,25,00,000	0	0	Government Securities ..	22,94,69 517	14	7
				Other authorised Securities under the Act ..	2,40,79,373	10	9
Capital paid up	5,62,50,000	0	0	Loans	11,93,72,693	2	1
Reserve	5,17,50,000	0	0	Cash Credits	31,61,26,987	9	6
Public Deposits	7,96,57,353	5	5	Inland Bills discounted and purchased.. ..	6,42,16,421	7	0
Other Deposits	73,31,10,612	13	7	Foreign Bills discounted and purchased.. ..	3,62,295	3	9
Loans against Securities per contra.	....			Bullion	....		
Loans from the Government of India under Section 20 of the Paper Currency Act, against Inland Bills discounted and purchased per contra.	....			Dead Stock	2,80,64,326	4	6
				Liability of Constituents for Contingent Liabilities per contra. .	....		
				Sundries	50,24,522	5	0
Contingent Liabilities ..	....			Balances with other Banks	7,08,234	12	11
Sundries	44,23,618	5	2		78,74,24,372	6	1
				Cash	13,77,67,212	2	1
Rs.	92,51,91,584	8	2	Rs. ..	92,51,91,584	8	2

The above Balance Sheet includes.—

	£ s. d.
Deposits in London	1,039,097-14-10
Advances and Investments in London	991,376-15-6
Cash and Balances at other Banks in London	55,224-10-1

Government Deposits.

The following statement shows the Government deposits with each Bank at various periods during the last 40 years or so :—

In Lakhs of rupees.

—	Bank of Bengal.	Bank of Bombay.	Bank of Madras.	Total.	—	Bank of Bengal.	Bank of Bombay.	Bank of Madras.	Total.
30 June 1881 ..	230	61	53	344	1913 ..	247	167	68	482
1886 ..	329	82	39	450	1914 ..	290	197	93	580
1891 ..	332	97	53	482	1915 ..	263	187	102	552
1896 ..	225	88	57	370	1916 ..	336	263	115	714
1901 ..	187	90	63	340	1917 ..	1338	716	209	2263
1906 ..	186	93	46	325	1918 ..	664	549	213	1426
1911 ..	198	129	77	404	1919 ..	346	298	142	786
1912 ..	210	155	75	440	1920 ..	801	663	170	1634
					26 January 1921.	364	206	138	708

IMPERIAL BANK.

30th June 1921	2,220
„ 1922	1,672
„ 1923	1,256
„ 1924	2,208
„ 1925	2,252
„ 1926	3,254
„ 1927	1,004
„ 1928	796

Government Deposits.

The proportions which Government deposits have borne from time to time to the total Capital Reserve and deposit of the three Banks are shown below :—

In Lakhs of Rupees.

—	1 Capital.	2 Reserve.	3 Government deposits.	4 Other deposits.	Proportion of Government deposits to 1, 2, 3 & 4.
1st December.					
1896	350	158	299	1292	14·2 per cent.
1901	360	213	340	1463	14·3 ,,
1906	360	279	307	2745	8·3 ,,
1907	360	294	335	2811	8·8 ,,
1908	360	309	325	2861	8·4 ,,
1909	360	318	307	3265	7·4 ,,
1910	360	331	339	3234	9·7 ,,
1911	360	340	438	3419	9·6 ,,
1912	375	361	426	3578	9·0 ,,
1913	375	370	587	3644	11·8 ,,
1914	375	386	561	4002	10·5 ,,
1915	375	369	487	3860	9·5 ,,
1916	375	358	520	4470	9·0 ,,
1917	375	363	771	6771	9·3 ,,
1918	375	340	864	5097	12·9 ,,
1919	375	355	772	7226	8·8 ,,
1920	375	375	901	7725	9·6 ,,
30th June (Imperial Bank).					
1921	547	371	2220	7016	21·8 ,,
1922	562	411	1672	6336	18·6 ,,
1923	562	435	1256	7047	13·5 ,,
1924	562	457	2208	7662	20·2 ,,
1925	562	477	2252	7588	20·7 ,,
1926	562	492	3254	7530	27·4 ,,
1927	562	507	1004	7317	10·6 ,,
1928	562	517	796	7331	8·6 ,,

Recent Progress.

The following statements show the progress made by the three Banks prior to their amalgamation into the Imperial Bank :—

In Lakhs of Rupees.

BANK OF BENGAL.

—	Capital.	Reserve.	Govt. deposits.	Other deposits.	Cash.	Investments.	Dividend for year.
31st December.							
1895	200	68	184	677	422	132	10 per cent.
1900	200	103	155	582	243	136	11 ,,
1905	200	140	167	1204	396	181	12 ,,
1906	200	150	160	1505	528	149	12 ,,
1907	200	157	187	1573	460	279	12 ,,
1908	200	165	178	1575	507	349	13 ,,
1909	200	170	168	1760	615	411	14 ,,
1910	200	175	198	1609	514	368	14 ,,
1911	200	180	270	1677	729	321	14 ,,
1912	200	185	234	1711	665	310	14 ,,
1913	200	191	301	1824	840	319	14 ,,
1914	200	200	287	2160	1169	621	16 ,,
1915	200	*204	265	1978	785	793	16 ,,
1916	200	*213	274	2143	772	768	16 ,,
1917	200	†221	448	2934	1482	773	17 ,,
1918	200	‡189	584	2392	894	779	17 ,,
1919	200	‡200	405	3254	997	864	17 ,,
1920	200	‡210	434	3398	1221	910	19½ ,,

* Includes Rs. 63 lakhs as a reserve for depreciation of investments.
† ,, 67 ,, ,, ,, ,,
‡ ,, 25 ,, ,, ,, ,,

BANK OF BOMBAY.

	Capital.	Reserve.	Govt. deposits.	Other deposits.	Cash.	Investments.	Dividend for year.
1 ..	100	51	76	358	228	105	11 per cent.
1 ..	100	70	87	432	129	89	11 ,,
1 ..	100	87	92	676	259	158	12 ,,
1 ..	100	92	101	832	354	177	12 ,,
1 ..	100	96	112	821	324	164	13 ,,
1 ..	100	101	94	832	377	149	13 ,,
1 ..	100	103	120	1035	415	163	13 ,,
1 ..	100	105	152	1053	436	149	14 ,,
1 ..	100	106	107	1104	463	208	14 ,,
1 ..	100	106	117	1124	315	210	14 ,,
1 ..	100	106	200	1015	477	232	14 ,,
1 ..	100	110	183	1081	646	202	15 ,,
1 ..	100	100	136	1079	423	276	15 ,,
1 ..	100	60	142	1367	667	312	15 ,,
1 ..	100	92	235	2817	1398	744	17½ ,,
1 ..	100	101	177	1749	542	353	18½ ,,
1 ..	100	110	262	2756	928	315	19½ ,,
1 ..	100	120	349	2748	876	298	22 ,,

BANK OF MADRAS.

	Capital.	Reserve.	Govt. deposits.	Other deposits.	Cash.	Investments.	Dividend for year.
1 ..	50	16	45	278	144	45	10 per cent.
1 ..	60	22	35	260	82	67	8 ,,
1 ..	60	30	47	344	140	71	10 ,,
1 ..	60	32	54	355	151	81	10 ,,
1 ..	60	36	35	416	162	84	10 ,,
1 ..	60	40	52	447	153	84	11 ,,
1 ..	60	44	49	500	141	79	12 ,,
1 ..	60	48	72	567	184	85	12 ,,
1 ..	60	52	59	625	165	104	12 ,,
1 ..	75	70	75	743	196	113	12 ,,
1 ..	75	73	86	805	219	117	12 ,,
1 ..	75	76	91	761	267	134	12 ,,
1 ..	75	65	86	803	256	184	12 ,,
1 ..	75	55	104	960	286	161	12 ,,
1 ..	75	50	87	1020	496	94	12 ,,
1 ..	75	50	102	954	271	139	12 ,,
1 ..	75	45	104	1215	436	175	12 ,,
1 ..	75	45	118	1579	505	211	18 ,,

IMPERIAL BANK.

	Capital.	Reserve.	Govt. deposits.	Other deposits.	Cash.	Investments.	Dividend for year.
1 ..	547	371	22,20	70,16	34,34	16,52	16 per cent.
1 ..	562	411	16,72	63,36	33,95	900	16 ,,
1 ..	562	435	12,56	70,47	29,13	925	16 ,,
1 ..	562	457	22,08	76,62	21,95	11,75	16 ,,
1 ..	562	477	22,52	75,88	35,82	14,13	16 ,,
1 ..	562	492	32,54	75,30	45,03	21,88	16 ,,
1 ..	562	507	10,04	73,17	22,83	20,50	16 ,,
1 ..	562	517	796	73,31	13,77	25,35	16 ,,

THE EXCHANGE BANKS.

T... carrying on Exchange business in... merely branch agencies of Banks ha... head offices in London, on the Co... in the Far East and the United Sta... inally their business was confined aln... sively to the financing of the exter... of India; but in recent years mo..., while continuing to finance this pa... s trade, have also taken an active pa... nancing of the internal portion also at... where their branches are situated. ...e the Banks carried on their operatio... dia almost entirely with money bo... sewhere, principally in London—th... ffices of the Banks attracting deposits for use in India by offering rates of interest much higher than the English Banks were able to quote. Within recent years however it has been discovered that it is possible to attract deposits in India on quite as favourable terms as can be done in London and a very large proportion of the financing done by the Exchange Banks is now carried through by means of money actually borrowed in India. No information is available as to how far *each* Bank has secured deposits in India, but the following statement published by the Director-General of Statistics in India shows how rapidly such deposits have grown in the aggregate within recent years.

TOTAL DEPOSITS OF ALL EXCHANGE BANKS SECURED IN INDIA.
In Lakhs of Rupees.

Year	Deposits
1895	1030
1900	1050
1905	1704
1910	2479
1911	2816
1912	2953
1913	3103
1914	3014
1915	3354
1916	3803
1917	5337
1918	6185
1919	7435
1920	7480
1921	7519
1922	7338
1923	6844
1924	7063
1925	7054
1926	7154

Exchange Banks' Investments.

Turning now to the question of the investment of the Banks' resources, so far as it concerns India, this to a great extent consists of the purchase of bills drawn against imports and exports to and from India.

The financing of the import trade originated and is carried through however for the most part by Branches outside India, the Indian Branches' share in the business consisting principally in collecting the amount of the bills at maturity and in furnishing their other branches with information as to the means and standing of the drawees of the bills, and it is as regards the export business that the Indian Branches are more immediately concerned. The Exchange Banks have practically a monopoly of the export finance in India and in view of the dimensions of the trade which has to be dealt with the Banks would under ordinary circumstances require to utilise a very large proportion of their resources in carrying through the business. They are able however by a system of rediscount in London to limit the employment of their own resources to a comparatively small figure in relation to the business they actually put through. No definite information can be secured as to the extent to which rediscounting in London is carried on but the following figures appearing in the balance sheets dated 31st December 1927 of the undernoted Banks will give some idea of this

LIABILITY ON BILLS OF EXCHANGE RE-DISCOUNTED AND STILL CURRENT.

	£
Chartered Bank of India, Australia and China.	7,045,000
Eastern Bank, Ld.	789,000
Hongkong and Shanghai Banking Corporation.	6,718,000
Mercantile Bank of India, Ld.	3,268,000
National Bank of India, Ld...	6,915,000
P. & O. Banking Corporation, Ld.	7,623,000
	32,358,000

The above figures do not of course relate to re-discounts of Indian bills alone, as the Banks operate in other parts of the world also, but it may safely be inferred that bills drawn in India form a very large proportion of the whole.

The bills against exports are largely drawn at three months' sight and may either be "clean" or be accompanied by the documents relating to the goods in respect of which they are drawn. Most of them are drawn on well known firms at home or against credits opened by Banks or financial houses in England and bearing as they do an Exchange Bank endorsement they are readily taken up by the discount houses and Banks in London. Any bills purchased in India are sent home by the first possible Mail so that presuming they are rediscounted as soon as they reach London the Exchange Banks are able to secure the return of their money in about 16 or 17 days instead of having to wait for three months which would be the case if they were unable to rediscount. It must not be assumed however that all bills are rediscounted as soon as they reach London as at times it suits the Banks to hold up the bills in anticipation of a fall in the London discount rate while on occasions also the Banks prefer to hold the bills on their own account as an investment until maturity.

The Banks place themselves in funds in India for the purpose of purchasing export bills in a variety of ways of which the following are the principal :—

(1) Proceeds of import bills as they mature.

(2) Sale of drafts and telegraphic transfers payable in London and elsewhere out of India.

(3) Purchase of Council Bills and Telegraphic Transfers payable in India from the Secretary of State.

(4) Imports of bar gold and silver bullion.

(5) Imports of sovereigns from London, Egypt or Australia.

The remaining business transacted by the Banks in India is of the usual nature and need not be given in detail.

An interesting event in Indian Banking history is the recent entry in the Banking field here of one of the English "Big Five." This has been brought about by the acquisition of the business of Cox & Co., by Lloyds Bank.

The following is a statement of the position of the various Exchange Banks carrying on business in India as at 31st December 1927:—

In Thousands of £.

Name.	Capital.	Reserve.	Deposits.	Cash and Investments.
Banco Nacional Ultramarino	11,111	10,888	68,154	21,263
Bank of Taiwan, Ltd.	1,312	....	23,195	15,834
Chartered Bank of India, Australia & China, Ltd.	3,000	4,000	45,121	19,359
Comptoir National D'Escompte de Paris	10,000	4,066	290,232	52,796
Eastern Bank, Ltd.	1,000	400	6,201	5,199
Hongkong & Shanghai Banking Corporation, Ltd.	2,031	7,371	56,640	23,578
Imperial Bank of Persia	650	570	7,804	8,157
Lloyds Bank, Ltd.	15,810	10,000	357,184	158,519
Mercantile Bank of India, Ltd. ..	1,050	1,420	14,442	7,953
Mitsui Bank, Ltd.	6,000	5,300	56,033	24,187
National Bank of India, Ltd.	2,000	2,900	33,655	16,985
National City Bank of New York ..	18,000	14,793	233,703	71,760
Netherlands Trading Society	6,666	3,333	35,229	9,663
Netherlands India Commercial Bank ..	4,583	2,182	16,698	6,088
P. & O. Banking Corporation, Ltd. ..	2,594	180	7,843	5,059
Sumitomo Bank, Ltd.	5,000	2,500	59,544	28,970
Yokohama Specie Bank, Ltd.	10,000	10,250	57,785	38,419

JOINT STOCK BANKS.

Previous to 1906 there were few Banks of this description operating in India, and such as were then in existence were of comparatively small importance and had their business confined to a very restricted area. The rapid development of this class of Bank, which has been so marked a feature in Banking within recent years, really had its origin in Bombay and set in with the establishment of the Bank of India and the Indian Specie Bank in 1906. After that time there was a perfect stream of new flotations, and although many of the new Companies confined themselves to legitimate banking business, on the other hand a very large number engaged in other businesses in addition and can hardly be properly classed as Banks.

These Banks made very great strides during the first few years of their existence, but it was generally suspected in well informed circles that the business of many of the Banks was of a very speculative and unsafe character and it was a matter of no great surprise to many people when it became known that some of the Banks were in difficulties.

The first important failure to take place was that of the People's Bank of India and the loss of confidence caused by the failure of that Bank resulted in a very large number of other failures, the principal being that of the Indian Specie Bank.

Since those events of ten years ago confidence has been largely restored. But in April 1923 the Alliance Bank of Simla suspended payment and is now in voluntary liquidation. The effect of the failure of this old established Bank might have been disastrous but for the prompt action of the Imperial Bank which dealt with the situation in close association with the Government of India. The Imperial Bank undertook to pay the depositors of the Alliance Bank 50 per cent. of the amounts due to them. A panic was averted and a critical period was passed through with little difficulty.

During 1923 the Tata Industrial Bank, which was established in 1918, was merged in the Central Bank of India.

The following shows the position of the better known existing Banks as it appears in the latest available Balance Sheets :—

In Lakhs of Rupees.

Name.	Capital.	Reserve.	Deposits.	Cash and Investments.
Allahabad Bank, Ltd., affiliated to P. & O. Banking Corporation, Ltd. ..	35	44	1,027	532
Bank of Baroda, Ltd.	30	23	550	372
Bank of India, Ltd.	100	82	1,132	451
Bank of Mysore, Ltd.	20	13	183	82
Central Bank of India, Ltd.	168	100	1,599	1,106
Indian Bank, Ltd. (Madras)	12	8	113	22
Karachi Bank, Ltd.	2	1	26	16
Punjab National Bank, Ltd.	31	14	727	276
Union Bank of India, Ltd.	39	5	50	49

Growth of Joint Stock Banks.

The following figures appearing in the Report of the Director-General of Statistics shew the growth of the Capital, Reserve and Deposits of the principal Joint Stock Banks registered in India :—

In Lakhs of rupees.

	Capital.	Reserve.	Deposits.
1870 ..	9	1	13
1875 ..	14	2	27
1880 ..	18	3	63
1885 ..	18	5	94
1890 ..	33	17	270
1895 ..	63	31	566
1900 ..	82	45	807
1906 ..	133	56	1155
1907 ..	229	63	1400
1908 ..	239	69	1626
1909 ..	266	87	2049
1910 ..	275	100	2565
1911 ..	285	126	2529
1912 ..	291	134	2725
1913 ..	231	132	2259
1914 ..	251	141	1710
1915 ..	281	156	1787
1916 ..	287	173	2471
1917 ..	303	162	3117
1918 ..	436	165	4059
1919 ..	539	224	5899
1920 ..	837	255	7114
1921 ..	938	300	7689
1922 ..	802	261	6163
1923 ...	689	284	4442
1924 ..	690	380	5250
1925 ..	673	386	5449
1926 ..	661	408	5961

LONDON OFFICES, AGENTS OR CORRESPONDENTS OF BANKS AND FIRMS (DOING BANKING BUSINESS) IN INDIA.

Name of Bank.	London Office—Agents or Correspondents.	Address.
Imperial Bank of India	London Office	22, Old Broad Street, E. C. 2.
Other Banks & Kindred Firms.		
Allahabad Bank	National Provincial Bank ..	15, Bishopsgate, E. C. 2.
	P. & O. Banking Corpn. ..	117-122, Leadenhall Street. E. C. 3.
Bank of India	Westminster Bank	Bartholomew Lane, E. C. 2.
Bank of Morvi	National Provincial Bank (Holborn Circus Branch).	15, Bishopsgate, E. C. 2.
Central Bank of India	Lloyds Bank	42, Gracechurch St., E.C.3.
Grindlay & Co.	London Office	54, Parliament Street, S. W. 1.
Karnani Industrial Bank ..	Barclays Bank	168, Fenchurch Street, E. C. 3.
King's Branch (Calcutta) " " (Bombay)	Lloyds Bank	42, Gracechurch St., E.C.3.
Punjab National Bank	Midland Bank	5, Threadneedle St., E.C.2.
Simla Banking & Industrial Co.	Ditto	Ditto.
Union Bank of India	Westminster Bank	Bartholomew Lane, E.C. 2.
Exchange Banks.		
American Express Co., (Inc.) ..	London Office	62-a, Lombard Street, E. C. 3.
Banco Nacional Ultramarino ..	Ditto	9, Bishopsgate, E. C. 2
Bank of Taiwan	Ditto	Gresham House, 25, Broad Street, E. C. 2.
Chartered Bank of India, Australia and China	Ditto	38, Bishopsgate, E. C. 2.
Comptoir National d'Escompte de Paris	Ditto	8-13, King William Street, E.C. 4.
Eastern Bank	Ditto	2-3, Crosby Sq., E. C. 3.
Hongkong & Shanghai Banking Corporation	Ditto	9, Gracechurch St., E.C.3.
Imperial Bank of Persia	Ditto	33-36, King William Street, E. C. 4.
The National City Bank of New York	Ditto	36, Bishopsgate, E. C. 2.
Lloyds Bank	Ditto	42, Gracechurch St., E.C.3.
Ditto. (Cox's Branch) ..	Ditto	Ditto
Mercantile Bank of India ..	Ditto	15, Gracechurch St., E.C.3.
Mitsui Bank, Ltd	Ditto	100, Old Broad St., E.C. 2.
National Bank of India	Ditto	26, Bishopsgate, E. C. 2.
Nederlandsche Handel-Maatschappij	National Provincial Bank ..	15, Bishopsgate, E. C. 2.
Nederlandsche Indische Handelsbank	London Representative	Stone House, Bishopsgate, London; E. C. 2.
P. & O. Banking Corporation ..	London Office	117-122, Leadenhall Stre E. C. 3.
Sumitomo Bank	Ditto	67, Bishopsgate, E.C. 2.
Thomas Cook & Son	Ditto	Ludgate Circus, E. C. 4.
Yokohama Specie Bank	Ditto	7, Bishopsgate, E. C. 2.

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Imperial Bank of Persia	650	570	7,804	8,157
Lloyds Bank, Ltd.	15,810	10,000	357,184	158,519
Mercantile Bank of India, Ltd. ..	1,050	1,420	14,442	7,953
Mitsui Bank, Ltd.	6,000	5,300	56,033	24,187
National Bank of India, Ltd.	2,000	2,900	33,655	16,985
National City Bank of New York ..	18,000	14,793	233,703	71,760
Netherlands Trading Society	6,666	3,333	35,229	9,663
Netherlands India Commercial Bank ..	4,583	2,182	16,698	6,088
P. & O. Banking Corporation, Ltd. ..	2,594	180	7,843	5,059
Sumitomo Bank, Ltd.	5,000	2,500	59,544	28,970
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Previous to 1906 there were few Banks of this description operating in India, and such as were then in existence were of comparatively small importance and had their business confined to a very restricted area. The rapid development of this class of Bank, which has been so marked a feature in Banking within recent years, really had its origin in Bombay and set in with the establishment of the Bank of India and the Indian Specie Bank in 1906. After that time there was a perfect stream of new flotations, and although many of the new Companies confined themselves to legitimate banking business, on the other hand a very large number engaged in other businesses in addition and can hardly be properly classed as Banks.

These Banks made very great strides during the first few years of their existence, but it was generally suspected in well informed circles that the business of many of the Banks was of a very speculative and unsafe character and it was a matter of no great surprise to many people when it became known that some of the Banks were in difficulties.

The first important failure to take place was that of the People's Bank of India and the loss of confidence caused by the failure of that Bank resulted in a very large number of other failures, the principal being that of the Indian Specie Bank.

Since those events of ten years ago confidence has been largely restored. But in April 1923 the Alliance Bank of Simla suspended payment and is now in voluntary liquidation. The effect of the failure of this old established Bank might have been disastrous but for the prompt action of the Imperial Bank which dealt with the situation in close association with the Government of India. The Imperial Bank undertook to pay the depositors of the Alliance Bank 50 per cent. of the amounts due to them. A panic was averted and a critical period was passed through with little difficulty.

During 1923 the Tata Industrial Bank, which was established in 1918, was merged in the Central Bank of India.

The following shows the position of the better known existing Banks as it appears in the latest available Balance Sheets :—

In Lakhs of Rupees.

Name.	Capital.	Reserve.	Deposits.	Cash and Investments.
Allahabad Bank, Ltd., affiliated to P. & O. Banking Corporation, Ltd. ..	35	44	1,027	532
Bank of Baroda, Ltd.	30	23	550	372
Bank of India, Ltd.	100	82	1,132	451
Bank of Mysore, Ltd.	20	13	183	82
Central Bank of India, Ltd.	168	100	1,599	1,106
Indian Bank, Ltd. (Madras)	12	8	113	22
Karachi Bank, Ltd.	2	1	26	16
Punjab National Bank, Ltd.	31	14	727	276
Union Bank of India, Ltd.	39	5	50	49

Growth of Joint Stock Banks.

The following figures appearing in the Report of the Director-General of Statistics shew the growth of the Capital, Reserve and Deposits of the principal Joint Stock Banks registered in India :—

In Lakhs of rupees.

		Capital.	*Reserve.*	*Deposits.*
1870	..	9	1	13
1875	..	14	2	27
1880	..	18	3	63
1885	..	18	5	94
1890	..	33	17	270
1895	..	63	31	566
1900	..	82	45	807
1906	..	133	56	1155
1907	..	229	63	1400
1908	..	239	69	1626
1909	..	266	87	2049
1910	..	275	100	2565
1911	..	285	126	2529
1912	..	291	134	2725
1913	..	231	132	2259
1914	..	251	141	1710
1915	..	281	156	1787
1916	..	287	173	2471
1917	..	303	162	3117
1918	..	436	165	4059
1919	..	539	224	5899
1920	..	837	255	7114
1921	..	938	300	7689
1922	..	802	261	6163
1923	...	689	284	4442
1924	..	690	380	5250
1925	..	673	386	5449
1926	..	661	408	5061

LONDON OFFICES, AGENTS OR CORRESPONDENTS OF BANKS AND FIRMS (DOING BANKING BUSINESS) IN INDIA.

Name of Bank.	London Office—Agents or Correspondents.	Address.
Imperial Bank of India	London Office	22, Old Broad Street, E. C. 2.
Other Banks & Kindred Firms.		
Allahabad Bank	National Provincial Bank ..	15, Bishopsgate, E. C. 2.
	P. & O. Banking Corpn. ..	117-122, Leadenhall Street. E. C. 3.
Bank of India	Westminster Bank	Bartholomew Lane, E. C. 2.
Bank of Morvi	National Provincial Bank (Holborn Circus Branch).	15, Bishopsgate, E. C. 2.
Central Bank of India	Lloyds Bank	42, Gracechurch St., E.C.3.
Grindlay & Co.	London Office	54, Parliament Street, S. W. 1.
Karnani Industrial Bank ..	Barclays Bank	168, Fenchurch Street, E. C. 3.
King's Branch (Calcutta) ,, ,, (Bombay)	Lloyds Bank	42, Gracechurch St., E.C.3.
Punjab National Bank	Midland Bank	5, Threadneedle St., E.C.2.
Simla Banking & Industrial Co.	Ditto	Ditto.
Union Bank of India	Westminster Bank	Bartholomew Lane, E.C. 2.
Exchange Banks.		
American Express Co., (Inc.) ..	London Office	62-a, Lombard Street, E. C. 3.
Banco Nacional Ultramarino ..	Ditto	9, Bishopsgate, E. C. 2
Bank of Taiwan	Ditto	Gresham House, 25, Broad Street, E. C. 2.
Chartered Bank of India, Australia and China	Ditto	38, Bishopsgate, E. C. 2.
Comptoir National d'Escompte de Paris	Ditto	8-13, King William Street, E. C. 4.
Eastern Bank	Ditto	2-3, Crosby Sq., E. C. 3.
Hongkong & Shanghai Banking Corporation	Ditto	9, Gracechurch St., E.C.3.
Imperial Bank of Persia	Ditto	33-36, King William Street, E. C. 4.
The National City Bank of New York	Ditto	36, Bishopsgate, E. C. 2.
Lloyds Bank	Ditto	42, Gracechurch St., E.C.3.
Ditto. (Cox's Branch) ..	Ditto	Ditto
Mercantile Bank of India ..	Ditto	15, Gracechurch St., E.C.3.
Mitsui Bank, Ltd	Ditto	100, Old Broad St., E.C. 2.
National Bank of India	Ditto	26, Bishopsgate, E. C. 2.
Nederlandsche Handel-Maatschappij	National Provincial Bank ..	15, Bishopsgate, E. C. 2.
Nederlandsche Indische Handelsbank	London Representative	Stone House, Bishopsgate, London; E. C. 2.
P. & O. Banking Corporation ..	London Office	117-122, Leadenhall Stre E. C. 3.
Sumitomo Bank	Ditto	67, Bishopsgate, E.C. 2.
Thomas Cook & Son	Ditto	Ludgate Circus, E. C. 4.
Yokohama Specie Bank	Ditto	7, Bishopsgate, E. C. 2.

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1904	..	9492	1536	..	..	365	11393
1905	..	10927	1560	..	..	324	12811
1906	..	10912	1583	..	..	400	12895
1907	22444	12645	1548	..	..	530	37167
1908	21281	12585	1754	..	..	643	36263
1909	19776	14375	1948	..	..	702	36801
1910	22238	16652	2117	4765	..	755	46527
1911	25763	17605	2083	5399	..	762	51612
1912	28831	20831	1152	6043	..	1159	58016
1913	33133	21890	2340	6198	..	1219	64780
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1915	32266	16462	1887	4069	..	1352	56036
1916	48017	24051	2495	4853	..	1503	80919
1917	47193	33655	2339	4966	..	2028	90181
1918	74397	53362	2528	6927	..	2429	139643
1919	90241	76250	3004	8837	..	2266	180598
1920	153388	126353	7500	10779	..	3120	301140
1921	91672	89788	3847	11875	..	3579	200761
1922	94426	86683	4279	12220	9681	3234	210523
1923	89148	75015	4722	11094	11940	4064	195983
1924	92249	65250	5546	11555	13134	4515	192249
1925	101833	51944	5716	12493	14978	4119	191083
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1903	..	8762	1464	..	..	340	10566
1904	..	9492	1536	..	..	365	11393
1905	..	10927	1560	..	..	324	12811
1906	..	10912	1583	..	..	400	12895
1907	22444	12645	1548	..	..	530	37167
1908	21281	12585	1754	..	..	643	36263
1909	19776	14375	1948	..	..	702	36801
1910	22238	16652	2117	4765	..	755	46527
1911	25763	17605	2083	5399	..	762	51612
1912	28831	20831	1152	6043	..	1159	58016
1913	33133	21890	2340	6198	..	1219	64780
1914	28031	17696	2127	4989	.	1315	54158
1915	32266	16462	1887	4069	..	1352	56036
1916	48017	24051	2495	4853	..	1503	80919
1917	47193	33655	2339	4966	..	2028	90181
1918	74397	53362	2528	6927	..	2429	139643
1919	90241	76250	3004	8837	..	2266	180598
1920	153388	126353	7500	10779	..	3120	301140
1921	91672	89788	3847	11875	..	3579	200761
1922	94426	86683	4279	12220	9681	3234	210523
1923	89148	75015	4722	11094	11940	4064	195983
1924	92249	65250	5546	11555	13134	4515	192249
1925	101833	51944	5716	12493	14978	4119	191083
1926	95944	42066	5688	12511	16033	3166	175408
1927	102392	39826	5629	12609	15997	3057	179510

INDIAN PRIVATE BANKERS AND SHROFFS.

Indian private Bankers and Shroffs flourished in India long before Joint Stock Banks were ever thought of, and it seems likely that they will continue to thrive for some very considerable time to come. The use of the word "Shroff" is usually associated with a person who charges usurious rates of interest to impecunious people, but this is hardly fair to the people known as "shroffs" in banking circles, as there is no doubt that the latter are of very real service to the business community and of very great assistance to Banks in India. Under present conditions the Banks in India can never hope to be able to get into sufficiently close touch with the affairs of the vast trading community in India to enable them to grant accommodation to more than a few of these traders direct and it is in his capacity as middleman that the shroff proves of such great service. In this capacity also he brings a very considerable volume of business within the scope of the Presidency Banks Act, and enables the Presidency Banks to give accommodation which, without his assistance, the Banks would not be permitted to give. The shroff's position as an intermediary between the trading community and the Banks usually arises in something after the following manner. A shopkeeper in the bazaar, with limited means of his own, finds that, after using all his own money, he still requires say Rs. 25,000 to stock his shop suitably. He thereupon approaches the shroff, and the latter after very careful inquiries as to the shopkeeper's position grants the accommodation, if he is satisfied that the business is safe. The business, as a rule, is arranged through a hoondee broker, and in the case referred to the latter may probably approach about ten shroffs and secure accommodation from them to the extent of Rs. 2,500 each. A hoondee usually drawn at a currency of about 2 months is almost invariably taken by the shroffs in respect of such advances.

A stage is reached however when the demands on the shroffs are greater than they are able to meet out of their own money, and it is at this point that the assistance of the Banks is called into requisition. The shroffs do this by taking a number of the bills they already hold to the Banks for discount under their endorsement, and the Banks accept such bills freely to an extent determined in each case by the standing of the shroff and the strength of the drawers. The extent to which any one shroff may grant accommodation in the bazaar is therefore dependent on two factors, *viz.*, (1) the limit which he himself may think it advisable to place on his transactions, and (2) the extent to which the Banks are prepared to discount bills bearing his endorsement. The shroffs keep in very close touch with all the traders to whom they grant accommodation, and past experience has shewn that the class of business above referred to is one of the safest the Banks can engage in.

The rates charged by the shroffs are usually based on the rates at which they in turn can discount the bills with the Banks and necessarily vary according to the standing of the borrower and with the season of the year. Generally speaking, however, a charge of two annas per cent. per mensem above the Bank's rate of discount, or 1½ °/o is a fair average rate charged in Bombay to a first class borrower. Rates in Calcutta and Madras are on a slightly higher scale due in a great measure to the fact that the competition among the shroffs for business is not so keen in these places as it is in Bombay.

The shroffs who engage in the class of business above described are principally Marwaries and Multanis having their Head Offices for the most part in Bikanir and Shikarpur, respectively, the business elsewhere than at the Head Offices being carried on by "Moonims" who have very wide powers.

It is not known to what extent native bankers and shroffs receive deposits and engage in exchange business throughout India, but there is no doubt that this is done to a very considerable extent.

THE BANK RATE.

Formerly each Presidency Bank fixed its own Bank Rate, and the rates were not uniform. Now the Imperial Bank fixes the rate for the whole of India. The rate fixed represents the rate charged by the Banks on demand loans against Government securities only and advances on other securities or discounts are granted as a rule at a slightly higher rate. Ordinarily such advances or discounts are granted at from one-half to one per cent. over the official rate; but this does not always apply and in the monsoon months, when the Bank rate is sometimes nominal, it often happens that such accommodation is granted at the official rate or even less.

The following statement shows the average Bank Rate since the Imperial Bank was constituted:—

Year.	1st Half-year.	2nd Half-year.	Yearly average.
1921	6·038	5·108	5·573
1922	7·132	4·510	5·821
1923	7·419	4·5	5·959
1924	8·05	5·315	6·682
1925	6·585	4·701	5·643
1926	5·651	4·	4·825
1927	6·508	4·956	5·732
1928	6·945	....	....

TABLE OF WAGES, INCOME, &c.

Showing the amount for one or more days at the rates of 1 to 16 Rupees per Month of 31 Days.

Rupees.	1			2			3			4			5			6			7			8		
Days.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1	0	0	6	0	1	0	0	1	6	0	2	0	0	2	6	0	3	1	0	3	7	0	4	1
2	0	1	0	0	2	0	0	3	1	0	4	1	0	5	1	0	6	2	0	7	2	0	8	3
3	0	1	6	0	3	1	0	4	7	0	6	2	0	7	8	0	9	3	0	10	10	0	12	4
4	0	2	0	0	4	1	0	6	2	0	8	3	0	10	3	0	12	4	0	14	5	1	0	6
5	0	2	6	0	5	1	0	7	8	0	10	3	0	12	10	0	15	5	1	2	0	1	4	7
6	0	3	1	0	6	2	0	9	3	0	12	4	0	15	5	1	2	6	1	5	8	1	8	9
7	0	3	7	0	7	2	0	10	10	0	14	5	1	2	0	1	5	8	1	9	3	1	12	10
8	0	4	1	0	8	3	0	12	4	1	0	6	1	4	7	1	8	9	1	12	10	2	1	0
9	0	4	7	0	9	3	0	13	11	1	2	6	1	7	2	1	11	10	2	0	6	2	5	1
10	0	5	1	0	10	3	0	15	5	1	4	7	1	9	9	1	14	11	2	4	1	2	9	3
11	0	5	8	0	11	4	1	1	0	1	6	8	1	12	4	2	2	0	2	7	8	2	13	4
12	0	6	2	0	12	5	1	2	6	1	8	9	1	14	11	2	5	8	2	11	4	3	1	6
13	0	6	8	0	13	5	1	4	1	1	10	10	2	1	6	2	8	3	2	14	11	3	5	8
14	0	7	2	0	14	5	1	5	8	1	12	10	2	4	1	2	11	4	3	2	6	3	9	9
15	0	7	8	0	15	6	1	7	2	1	14	11	2	6	8	2	14	5	3	6	2	3	13	11
16	0	8	3	1	0	3	1	8	9	2	1	0	2	9	3	3	1	6	3	9	9	4	2	0
17	0	8	9	1	1	6	1	10	3	2	3	1	2	11	10	3	4	7	3	13	4	4	[illegible]	2
18	0	9	3	1	2	6	1	11	10	2	5	1	2	14	5	3	7	8	4	1	0	4	10	3
19	0	9	9	1	3	7	1	13	4	2	7	2	3	1	0	3	10	10	4	4	7	4	14	6
20	0	10	3	1	4	7	1	14	11	2	9	3	3	3	7	3	13	11	4	8	3	5	2	[illegible]
21	0	10	9	1	5	8	2	0	6	2	11	4	3	6	2	4	1	0	4	11	10	5	6	8
22	0	11	4	1	6	8	2	2	0	2	13	4	3	8	9	4	4	1	4	15	5	5	10	10
23	0	11	10	1	7	8	2	3	6	2	15	5	3	11	4	4	7	2	5	3	1	5	14	11
24	0	12	4	1	8	9	2	5	1	3	1	6	3	13	11	4	10	3	5	6	8	6	3	1
25	0	12	10	1	9	9	2	6	2	3	3	7	4	0	6	4	13	4	5	10	3	6	7	2
26	0	13	4	1	10	10	2	8	3	3	5	8	4	3	0	5	0	6	5	13	11	6	11	4
27	0	13	11	1	11	10	2	9	9	3	7	8	4	5	8	5	3	7	6	1	6	6	15	5
28	0	14	5	1	12	10	2	11	4	3	9	9	4	8	3	5	6	8	6	5	1	7	3	7
29	0	14	11	1	13	11	2	12	11	3	11	10	4	10	10	5	9	9	6	8	9	7	7	8
30	0	15	5	1	14	11	2	14	5	3	13	11	4	13	4	5	12	10	6	12	4	7	11	10
31	1	0	0	2	0	0	3	0	0	4	0	0	5	0	0	6	0	0	7	0	0	8	0	0

Rupees.	9			10			11			12			13			14			15			16		
Days.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1	0	4	7	0	5	1	0	5	8	0	6	2	0	6	9	0	7	3	0	7	9	6	8	3
2	0	9	3	0	10	3	0	11	4	0	12	4	0	13	5	0	14	5	0	15	6	1	0	6
3	0	13	11	0	15	5	1	1	0	1	2	6	1	4	2	1	5	8	1	7	3	1	8	9
4	1	2	6	1	4	7	1	6	9	1	8	9	1	10	10	1	12	11	1	15	0	2	1	0
5	1	7	2	1	9	9	1	12	5	1	14	10	2	1	7	2	4	2	2	6	9	2	9	3
6	1	11	10	1	14	11	2	2	1	2	5	0	2	8	3	2	11	4	2	14	5	3	1	6
7	2	0	6	2	4	1	2	7	9	2	11	3	2	15	0	3	2	7	3	6	2	3	9	9
8	2	5	1	2	9	3	2	13	5	3	1	6	3	5	8	3	9	10	3	13	1	4	2	0
9	2	9	9	2	14	5	3	3	1	3	7	8	3	12	5	4	1	0	4	5	8	4	10	3
10	2	14	5	3	3	7	3	8	9	3	13	10	4	3	1	4	8	3	4	13	5	5	2	6
11	3	3	1	3	9	9	3	14	5	4	4	0	4	9	10	4	15	6	5	5	2	5	10	9
12	3	7	8	3	13	11	4	4	2	4	10	4	5	0	6	5	6	9	5	12	11	6	3	0
13	3	12	4	4	3	1	4	9	10	5	0	6	5	7	3	5	13	11	6	4	8	6	11	4
14	4	1	0	4	8	3	4	15	6	5	6	8	5	13	11	6	5	2	6	12	5	7	3	6
15	4	5	8	4	13	4	5	5	2	5	12	10	6	4	8	6	12	4	7	4	2	7	11	10
16	4	10	3	5	2	6	5	10	5	6	3	0	6	11	4	7	3	7	7	11	10	8	4	0
17	4	14	11	5	7	8	6	0	6	6	9	2	7	2	1	7	10	10	8	3	7	8	12	0
18	5	3	7	5	12	10	6	6	2	6	15	4	7	8	9	8	2	1	8	11	4	9	4	6
19	5	8	3	6	2	0	6	11	10	7	5	8	7	15	6	8	9	3	9	3	1	9	12	9
20	5	12	10	6	7	2	7	1	7	7	11	10	8	6	2	9	0	6	9	10	10	10	5	0
21	6	1	6	6	12	4	7	7	3	8	2	0	8	12	11	9	7	9	10	2	7	10	13	3
22	6	6	2	7	1	6	7	12	11	8	8	2	9	3	7	9	15	0	10	10	4	11	5	8
23	6	10	10	7	6	8	8	2	7	8	14	4	9	10	4	10	6	2	11	2	1	11	13	10
24	6	15	5	7	11	10	8	8	3	9	4	6	10	1	0	10	13	5	11	9	10	12	6	2
25	7	4	1	8	1	0	8	13	11	9	10	8	10	7	9	11	4	8	12	1	7	12	14	4
26	7	8	9	8	6	2	9	3	7	10	1	0	10	14	5	11	11	10	12	9	3	13	6	8
27	7	13	4	8	11	4	9	9	3	10	7	3	11	5	2	12	3	1	13	1	0	13	14	10
28	8	2	0	9	0	6	9	15	0	10	13	4	11	11	10	12	10	4	13	8	9	14	7	3
29	8	6	8	9	5	8	10	4	8	11	3	6	12	2	7	13	1	7	14	0	6	14	15	4
30	8	11	4	9	10	10	10	10	4	11	9	8	12	9	4	13	8	9	14	8	3	15	7	8
31	9	0	0	10	0	0	11	0	0	12	0	0	13	0	0	14	0	0	15	0	0	16	0	0

The Railways.

The history of Indian Railways very closely reflects the financial vicissitudes of the country. Not for some time after the establishment of Railways in England was their construction in India contemplated, and then to test their applicability to Eastern conditions three experimental lines were sanctioned in 1845. These were from Calcutta to Raniganj (120 miles), the East Indian Railway; Bombay to Kalyan (33 miles), Great Indian Peninsula Railway; and Madras to Arkonam (39 miles), Madras Railway. Indian Railway building on a serious scale dates from Lord Dalhousie's great minute of 1853, wherein, after dwelling upon the great social, political and commercial advantages of connecting the chief cities by rail, he suggested a great scheme of trunk lines linking the Presidencies with each other and the inland regions with the principal ports. This reasoning commended itself to the Directors of the East India Company, and it was powerfully reinforced when, during the Mutiny, the barriers imposed on free communication were severely felt. As there was no private capital in India available for railway construction, English Companies, the interest on whose capital was guaranteed by the State, were formed for the purpose. By the end of 1859 contracts had been entered into with eight companies for the construction of 5,000 miles of line, involving a guaranteed capital of £52 millions. These companies were (1) the East Indian; (2) the Great Indian Peninsula; (3) the Madras; (4) the Bombay, Baroda and Central India; (5) the Eastern Bengal; (6) the Indian Branch, now the Oudh and Rohilkund State Railway; (7) the Sind, Punjab and Delhi, now merged in the North Western State Railway; (8) the Great Southern of India, now the South Indian Railway. The scheme laid the foundations of the Indian Railway system as it exists to-day.

Early Disappointments.

The main principle in the formation of these companies was a Government guarantee on their capital, for this was the only condition on which investors would come forward. This guarantee was five per cent. coupled with the free grant of all the land required; in return the companies were required to share the surplus profits with the Government, after the guaranteed interest had been met; the interest charges were calculated at 22*d*. to the rupee; the Railways were to be sold to Government on fixed terms at the close of twenty-five years and the Government were to exercise close control over expenditure and working. The early results were disappointing. Whilst the Railways greatly increased the efficiency of the administration, the mobility of the troops, the trade of the country, and the movement of the population, they failed to make profits sufficient to meet the guaranteed interest. Some critics attributed this to the unnecessarily high standard of construction adopted, and to the engineers' ignorance of local conditions; the result was that by 1869 the deficit on the Railway budget was Rs. 166½ lakhs. Seeking for some more economical method of construction, the Government secured sanction to the building of lines by direct State Agency, and funds were allotted for the purpose, the metre-gauge being adopted for cheapness. Funds soon lapsed and the money available had to be diverted to converting the Sind and Punjab lines from metre to broad-gauge for strategic reasons. Government had therefore again to resort to the system of guarantee, and the Indian Midland (1882-85), since absorbed by the Great Indian Peninsula; the Bengal-Nagpur (1883-87) the Southern Maratha (1882); and the Assam Bengal (1891) were constructed under guarantees, but on easier terms than the first companies. Their total length was over 4,000 miles,

Famine and Frontiers.

In 1879, embarrassed by famine and by the fall of the exchange value of the rupee, Government again endeavoured to enlist unaided private enterprise. Four companies were promoted:—the Nilgiri, the Delhi-Umballa-Kalka, the Bengal Central, and the Bengal North-Western. The first became bankrupt, the second and third received guarantees, and the Tirhut Railway had to be leased to the fourth. A step of even greater importance was taken when Native States were invited to undertake construction in their own territories, and the Nizam's Government guaranteed the interest on 330 miles of line in the State of Hyderabad. This was the first of the large system of Native State Railways. In the first period up to 1870, 4,255 miles were opened, of which all save 45 were on the broad-gauge; during the next ten years there were opened 4,239, making the total 8,494 (on the broad-gauge 6,562, the metre 1,865, and narrow 67). Then ensued a period of financial ease. It was broken by the fall in exchange and the costly lines built on the frontier. The Penjdeh incident, which brought Great Britain and Russia to the verge of war, necessitated the connection of our outposts at Quetta and Chaman with the main trunk lines. The sections through the desolate Harnai and Bolan Passes were enormously costly; it is said that they might have been ballasted with rupees; the long tunnel under the Khojak Pass added largely to this necessary, but unprofitable, outlay.

Rebate Terms Established.

This induced the fourth period—the system of rebates. Instead of a gold subsidy, companies were offered a rebate on the gross earnings of the traffic interchanged with the main line, so that the dividend might rise to four per cent. but the rebate was limited to 20 per cent. of the gross earnings. Under these conditions, there were promoted the Ahmedabad-Prantej, the South Behar, and the Southern Punjab, although only in the case of the first were the terms strictly adhered to. The Barsi Light Railway, on the two feet six inches gauge, entered the field without any guarantee, and with rolling stock designed ot illustrate the carrying power of this gauge. The rebates terms being found unattractive in view of the competition of 4 per cent. trustee stocks; they were revised in 1896 to provide for an

purchase of the line was made, and interest of all capital outlay subsequent to the date on purchase, a clear profit of nearly ten millions. At the end of seventy-four years from 1880, when the annuity expires, the Government will come into receipt of a clear yearly income of upwards of £2,700,000, equivalent to the creation of a capital of sixty to seventy millions sterling. No other railway shows results quite equal to the East Indian, because, in addition to serving a rich country by an easy line, it possesses its own collieries and enjoys cheap coal. But with allowance for these factors, all the other guaranteed companies which have been acquired under similar conditions as their contracts expired, have proportionately swelled the revenue and assets of the State. It is difficult to estimate the amount which must be added to the capital debt of the Indian railways in order to counterbalance the loss during the period when the revenue did not meet the interest charges. According to one estimate it should be £50 millions. But even if that figure be taken, Government have a magnificent asset in their railway property.

Improving Open Lines.

These changes induced a corresponding change in Indian Railway policy. Up to 1900 the great work had been the provision of trunk lines. But with the completion of the Nagda-Muttra line, providing an alternative broad-gauge route from Bombay to Delhi through Eastern Rajputana, the trunk system was virtually complete. A direct broad-gauge route from Bombay to Sind is needed, but chiefly for strategic purposes. The poor commercial prospects of the line and the opposition of the Rao of Cutch to any through line in his territories, keep this scheme in the background. There does not exist any through rail connection between India and Burma, although several routes have been surveyed; the mountainous character of the region to be traversed, and the easy means of communication with Burma by sea, rob this scheme of any living importance. Further survey work was undertaken between 1914 and 1920, the three routes to be surveyed being the coast route, the Manipur route, and the Hukong valley route. The metre-gauge systems of Northern and Southern India must also be connected and Karachi given direct broad-gauge connection with Delhi, a project that is now under investigation. But these works are subordinate to the necessity for bringing the open lines up to their traffic requirements and providing them with feeders. The sudden increase in the trade of India found the main lines totally unprepared. Costly works were necessary to double lines, improve the equipment, provide new and better yards and terminal facilities and to increase the rolling stock. Consequently the demands on the open lines altogether overshadowed the provision of new lines. Even then the railway budget was found totally inadequate for the purpose, and a small Committee sat in London, under the chairmanship of Lord nchcape, to consider ways and means. This mmittee found that the amount which d be remuneratively spent on railway contion in India was limited only by the capacity of the money market. They fixed the annual allotment at £12,000,000 a year. Even this reduced sum could not always be provided.

Government Control and Re-organisation of Railway Board.

As the original contracts carried a definite Government guarantee of interest, it was necessary for Government to exercise strong supervision and control over the expenditure during construction, and over management and expenditure after the lines were open for traffic. For these purposes a staff of Consulting Engineers was formed, and a whole system of checks and counterchecks established, leading up to the Railway Branch of the Public Works Department of the Government of India. As traffic developed, the Indian Railways outgrew this dry nursing, and when the original contracts expired, and the interests of Government and the Companies synchronised, it became not only vexatious but unnecessary. Accordingly in 1901-02 Mr. Thomas Robertson was deputed by the Secretary of State to examine the whole question of the organization and working of the Indian Railways, and he recommended that the existing system should be replaced by a Railway Board, consisting of a Chairman and two members with a Secretary. The Board was formally constituted in March 1905. The Board was made subordinate to the Government of India in which it was represented by the Department of Commerce and Industry. It prepared the railway programme of expenditure and considered the greater questions of policy and economy affecting all the lines. Its administrative duties included the construction of new lines by State agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, the settlement of disputes between lines, the control and promotion of the staff on State lines, and the general supervision over the working and expenditure of the Company's lines. Two minor changes have taken place since the constitution of the Railway Board. In 1908, to meet the complaint that the Board was subjected to excessive control by the Department of Commerce and Industry, the powers of the Chairman were increased and he was given the status of a Secretary to Government with the right of independent access to the Viceroy; he usually sits in the Imperial Legislative Council as the representative of the Railway interest. In 1912 in consequence of complaints of the excessive interference of the Board with the Companies, an informal mission was undertaken by Lord Inchcape to reconcile differences. Various changes were introduced during the years 1912-1920 such as the modification of the rule that the President and members of the Railway Board should all be men of large experience in the working of railways due to the importance of financial and commercial considerations in connection with the control of Indian Railway policy. This decision was, however, revised in 1920 and an additional appointment of Financial Adviser to the Railway Board created instead. The question of the most suitable organization was further fully examined by the Acworth Committee in 1921

INDIAN PRIVATE BANKERS AND SHROFFS.

Indian private Bankers and Shroffs flourished in India long before Joint Stock Banks were ever thought of, and it seems likely that they will continue to thrive for some very considerable time to come. The use of the word "Shroff" is usually associated with a person who charges usurious rates of interest to impecunious people, but this is hardly fair to the people known as "shroffs" in banking circles, as there is no doubt that the latter are of very real service to the business community and of very great assistance to Banks in India. Under present conditions the Banks in India can never hope to be able to get into sufficiently close touch with the affairs of the vast trading community in India to enable them to grant accommodation to more than a few of these traders direct and it is in his capacity as middleman that the shroff proves of such great service. In this capacity also he brings a very considerable volume of business within the scope of the Presidency Banks Act, and enables the Presidency Banks to give accommodation which, without his assistance, the Banks would not be permitted to give. The shroff's position as an intermediary between the trading community and the Banks usually arises in something after the following manner. A shopkeeper in the bazaar, with limited means of his own, finds that, after using all his own money, he still requires say Rs. 25,000 to stock his shop suitably. He thereupon approaches the shroff, and the latter after very careful inquiries as to the shopkeeper's position grants the accommodation, if he is satisfied that the business is safe. The business, as a rule, is arranged through a hoondee broker, and in the case referred to the latter may probably approach about ten shroffs and secure accommodation from them to the extent of Rs. 2,500 each. A hoondee usually drawn at a currency of about 2 months is almost invariably taken by the shroffs in respect of such advances.

A stage is reached however when the demands on the shroffs are greater than they are able to meet out of their own money, and it is at this point that the assistance of the Banks is called into requisition. The shroffs do this by taking a number of the bills they already hold to the Banks for discount under their endorsement, and the Banks accept such bills freely to an extent determined in each case by the standing of the shroff and the strength of the drawers. The extent to which any one shroff may grant accommodation in the bazaar is therefore dependent on two factors, *viz.*, (1) the limit which he himself may think it advisable to place on his transactions, and (2) the extent to which the Banks are prepared to discount bills bearing his endorsement. The shroffs keep in very close touch with all the traders to whom they grant accommodation, and past experience has shewn that the class of business above referred to is one of the safest the Banks can engage in.

The rates charged by the shroffs are usually based on the rates at which they in turn can discount the bills with the Banks and necessarily vary according to the standing of the borrower and with the season of the year. Generally speaking, however, a charge of two annas per cent. per mensem above the Bank's rate of discount, or $1\frac{1}{2}$ °/ₒ is a fair average rate charged in Bombay to a first class borrower. Rates in Calcutta and Madras are on a slightly higher scale due in a great measure to the fact that the competition among the shroffs for business is not so keen in these places as it is in Bombay.

The shroffs who engage in the class of business above described are principally Marwaries and Multanis having their Head Offices for the most part in Bikanir and Shikarpur, respectively, the business elsewhere than at the Head Offices being carried on by "Moonims" who have very wide powers.

It is not known to what extent native bankers and shroffs receive deposits and engage in exchange business throughout India, but there is no doubt that this is done to a very considerable extent.

THE BANK RATE.

Formerly each Presidency Bank fixed its own Bank Rate, and the rates were not uniform. Now the Imperial Bank fixes the rate for the whole of India. The rate fixed represents the rate charged by the Banks on demand loans against Government securities only and advances on other securities or discounts are granted as a rule at a slightly higher rate. Ordinarily such advances or discounts are granted at from one-half to one per cent. over the official rate; but this does not always apply and in the monsoon months, when the Bank rate is sometimes nominal, it often happens that such accommodation is granted at the official rate or even less.

The following statement shows the average Bank Rate since the Imperial Bank was constituted:—

Year.	1st Half-year.	2nd Half-year.	Yearly average.
1921	6·038	5·108	5·573
1922	7·132	4·510	5·821
1923	7·410	4·5	5·959
1924	8·05	5·315	6·682
1925	6·585	4·701	5·643
1926	5·651	4·	4·825
1927	6·508	4·956	5·732
1928	6·945	....	....

BANKERS' CLEARING HOUSES.

The principal Clearing Houses in India are those of Calcutta, Bombay, Madras, Rangoon, Colombo and Karachi, and of these the first two are by far the most important. The members at these places consist of the Imperial Bank, most of the Exchange Banks and English Banking Agency firms, and a few of the better known of the local Joint Stock Banks. No Bank is entitled to claim to be a member as of right and any application for admission to a Clearing must be proposed and seconded by two members and be subject thereafter to ballot by the existing members.

The duties of settling Bank are undertaken by the Imperial Bank at each of the places mentioned and a representative of each member attends at the office of that Bank on each business day at the time fixed to deliver all cheques he may have negotiated on other members and to receive in exchange all cheques drawn on him negotiated by the latter. After all the cheques have been received and delivered the representative of each Bank advises the settling Bank of the difference between his total receipts and deliveries and the settling Bank thereafter strikes a final balance to satisfy itself that the totals of the debtor balances agrees with the total of the creditor balances. The debtor Banks thereafter arrange to pay the amounts due by them to the settling Bank during the course of the day and the latter in turn arranges to pay on receipt of those amounts the balances due to the creditor Banks. In practice however all the members keep Bank accounts with the settling Bank so that the final balances are settled by cheques and book entries thus doing away with the necessity for cash in any form.

The figures for the Clearing Houses in India above referred to are given below :—

Total amount of Cheques Cleared Annually.

In lakhs of Rupees.

——	Calcutta.	Bombay.	Madras.	Rangoon.	Colombo.	Karachi.	Total.
1901	Not available	6511	1338	Not available	..	178	8027
1902	..	7013	1295	..	..	268	8576
1903	..	8762	1464	..	..	340	10566
1904	..	9492	1536	..	..	365	11393
1905	..	10927	1560	..	..	324	12811
1906	..	10912	1583	..	..	400	12895
1907	22444	12645	1548	..	..	530	37167
1908	21281	12585	1754	..	..	643	36263
1909	19776	14375	1948	..	..	702	36801
1910	22238	16652	2117	4765	..	755	46527
1911	25763	17605	2083	5399	..	762	51612
1912	28831	20831	1152	6043	..	1159	58016
1913	33133	21890	2340	6198	..	1219	64780
1914	28031	17696	2127	4989	.	1315	54158
1915	32266	16462	1887	4069	..	1352	56036
1916	48017	24051	2495	4853	..	1503	80919
1917	47193	33655	2339	4966	..	2028	90181
1918	74397	53362	2528	6927	..	2429	139643
1919	90241	76250	3004	8837	..	2266	180598
1920	153388	126353	7500	10779	..	3120	301140
1921	91672	89788	3847	11875	..	3579	200761
1922	94426	86683	4279	12220	9681	3234	210523
1923	89148	75015	4722	11094	11940	4064	195983
1924	92249	65250	5546	11555	13134	4515	192249
1925	101833	51944	5716	12493	14978	4119	191083
1926	95944	42066	5688	12511	16033	3166	175408
1927	102392	39826	5629	12609	15997	3057	179510

TABLE OF WAGES, INCOME, &c.

Showing the amount for one or more days at the rates of 1 to 16 Rupees per Month of 31 Days.

Rupees.	1			2			3			4			5			6			7			8		
Days.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1	0	0	6	0	1	0	0	1	6	0	2	0	0	2	6	0	3	1	0	3	7	0	4	1
2	0	1	0	0	2	0	0	3	1	0	4	1	0	5	1	0	6	2	0	7	2	0	8	3
3	0	1	6	0	3	1	0	4	7	0	6	2	0	7	8	0	9	3	0	10	10	0	12	4
4	0	2	0	0	4	1	0	6	2	0	8	3	0	10	3	0	12	4	0	14	5	1	0	6
5	0	2	6	0	5	1	0	7	8	0	10	3	0	12	10	0	15	5	1	2	0	1	4	7
6	0	3	1	0	6	2	0	9	3	0	12	4	0	15	5	1	2	6	1	5	8	1	8	9
7	0	3	7	0	7	2	0	10	10	0	14	5	1	2	0	1	5	8	1	9	3	1	12	10
8	0	4	1	0	8	3	0	12	4	1	0	6	1	4	7	1	8	9	1	12	10	2	1	0
9	0	4	7	0	9	3	0	13	11	1	2	6	1	7	2	1	11	10	2	0	6	2	5	1
10	0	5	1	0	10	3	0	15	5	1	4	7	1	9	9	1	14	11	2	4	1	2	9	3
11	0	5	8	0	11	4	1	1	0	1	6	8	1	12	4	2	2	0	2	7	8	2	13	4
12	0	6	2	0	12	5	1	2	6	1	8	9	1	14	11	2	5	8	2	11	4	3	1	6
13	0	6	8	0	13	5	1	4	1	1	10	10	2	1	6	2	8	3	2	14	11	3	5	8
14	0	7	2	0	14	5	1	5	8	1	12	10	2	4	1	2	11	4	3	2	6	3	9	9
15	0	7	8	0	15	6	1	7	2	1	14	11	2	6	8	2	14	5	3	6	2	3	13	11
16	0	8	3	1	0	3	1	8	9	2	1	0	2	9	3	3	1	6	3	9	9	4	2	0
17	0	8	9	1	1	6	1	10	3	2	3	1	2	11	10	3	4	7	3	13	4	4	6	2
18	0	9	3	1	2	6	1	11	10	2	5	1	2	14	5	3	7	8	4	1	0	4	10	3
19	0	9	9	1	3	7	1	13	4	2	7	2	3	1	0	3	10	10	4	4	7	4	14	5
20	0	10	3	1	4	7	1	14	11	2	9	3	3	3	7	3	13	11	4	8	3	5	2	0
21	0	10	9	1	5	8	2	0	6	2	11	4	3	6	2	4	1	0	4	11	10	5	6	8
22	0	11	4	1	6	8	2	2	0	2	13	4	3	8	9	4	4	1	4	15	5	5	10	10
23	0	11	10	1	7	8	2	3	6	2	15	5	3	11	4	4	7	2	5	3	1	5	14	11
24	0	12	4	1	8	9	2	5	1	3	1	6	3	13	11	4	10	3	5	6	8	6	3	1
25	0	12	10	1	9	9	2	6	2	3	3	7	4	0	6	4	13	4	5	10	3	6	7	2
26	0	13	4	1	10	10	2	8	3	3	5	8	4	3	0	5	0	6	5	13	11	6	11	4
27	0	13	11	1	11	10	2	9	9	3	7	8	4	5	8	5	3	7	6	1	6	6	15	5
28	0	14	5	1	12	10	2	11	4	3	9	9	4	8	3	5	6	8	6	5	1	7	3	7
29	0	14	11	1	13	11	2	12	11	3	11	10	4	10	10	5	9	9	6	8	9	7	7	8
30	0	15	5	1	14	11	2	14	5	3	13	11	4	13	4	5	12	10	6	12	4	7	11	10
31	1	0	0	2	0	0	3	0	0	4	0	0	5	0	0	6	0	0	7	0	0	8	0	0

Rupees.	9			10			11			12			13			14			15			16		
Days.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1	0	4	7	0	5	1	0	5	8	0	6	2	0	6	9	0	7	3	0	7	9	6	8	3
2	0	9	3	0	10	3	0	11	4	0	12	4	0	13	5	0	14	5	0	15	6	1	0	6
3	0	13	11	0	15	5	1	1	0	1	2	6	1	4	2	1	5	8	1	7	3	1	8	9
4	1	2	6	1	4	7	1	6	9	1	8	9	1	10	10	1	12	11	1	15	0	2	1	0
5	1	7	2	1	9	9	1	12	5	1	14	10	2	1	7	2	4	2	2	6	9	2	9	3
6	1	11	10	1	14	11	2	2	1	2	5	0	2	8	3	2	11	4	2	14	5	3	1	6
7	2	0	6	2	4	1	2	7	9	2	11	3	2	15	0	3	2	7	3	6	2	3	9	9
8	2	5	1	2	9	3	2	13	5	3	1	6	3	5	8	3	9	10	3	13	1	4	2	0
9	2	9	9	2	14	5	3	3	1	3	7	8	3	12	5	4	1	0	4	5	8	4	10	3
10	2	14	5	3	3	7	3	8	9	3	13	10	4	3	1	4	8	3	4	13	5	5	2	6
11	3	3	1	3	9	9	3	14	5	4	4	0	4	9	10	4	15	6	5	5	2	5	10	9
12	3	7	8	3	13	11	4	4	2	4	10	4	5	0	6	5	6	9	5	12	11	6	3	0
13	3	12	4	4	3	1	4	9	10	5	0	6	5	7	3	5	13	11	6	4	8	6	11	4
14	4	1	0	4	8	3	4	15	6	5	6	8	5	13	11	6	5	2	6	12	5	7	3	6
15	4	5	8	4	13	4	5	5	2	5	12	10	6	4	8	6	12	4	7	4	2	7	11	10
16	4	10	3	5	2	6	5	10	5	6	3	0	6	11	4	7	3	7	7	11	10	8	4	0
17	4	14	11	5	7	8	6	0	6	6	9	2	7	2	1	7	10	10	8	3	7	8	12	0
18	5	3	7	5	12	10	6	6	2	6	15	4	7	8	9	8	2	1	8	11	4	9	4	6
19	5	8	3	6	2	0	6	11	10	7	5	8	7	15	6	8	9	3	9	3	1	9	12	9
20	5	12	10	6	7	2	7	1	7	7	11	10	8	6	2	9	0	6	9	10	10	10	5	0
21	6	1	6	6	12	4	7	7	3	8	2	0	8	12	11	9	7	9	10	2	7	10	13	3
22	6	6	2	7	1	6	7	12	11	8	8	2	9	3	7	9	15	0	10	10	4	11	5	8
23	6	10	10	7	6	8	8	2	7	8	14	4	9	10	4	10	6	2	11	2	1	11	13	10
24	6	15	5	7	11	10	8	8	3	9	4	6	10	1	0	10	13	5	11	9	10	12	6	2
25	7	4	1	8	1	0	8	13	11	9	10	8	10	7	9	11	4	8	12	1	7	12	14	4
26	7	8	9	8	6	2	9	3	7	10	1	0	10	14	5	11	11	10	12	9	3	13	6	8
27	7	13	4	8	11	4	9	9	3	10	7	3	11	5	2	12	3	1	13	1	0	13	14	10
28	8	2	0	9	0	6	9	15	0	10	13	4	11	11	10	12	10	4	13	8	9	14	7	3
29	8	6	8	9	5	8	10	4	8	11	3	6	12	2	7	13	1	7	14	0	6	14	15	4
30	8	11	4	9	10	10	10	10	4	11	9	8	12	9	4	13	8	9	14	8	3	15	7	8
31	9	0	0	10	0	0	11	0	0	12	0	0	13	0	0	14	0	0	15	0	0	16	0	0

The Railways.

The history of Indian Railways very closely reflects the financial vicissitudes of the country. Not for some time after the establishment of Railways in England was their construction in India contemplated, and then to test their applicability to Eastern conditions three experimental lines were sanctioned in 1845. These were from Calcutta to Raniganj (120 miles), the East Indian Railway; Bombay to Kalyan (33 miles), Great Indian Peninsula Railway; and Madras to Arkonam (39 miles), Madras Railway. Indian Railway building on a serious scale dates from Lord Dalhousie's great minute of 1853, wherein, after dwelling upon the great social, political and commercial advantages of connecting the chief cities by rail, he suggested a great scheme of trunk lines linking the Presidencies with each other and the inland regions with the principal ports. This reasoning commended itself to the Directors of the East India Company, and it was powerfully reinforced when, during the Mutiny, the barriers imposed on free communication were severely felt. As there was no private capital in India available for railway construction, English Companies, the interest on whose capital was guaranteed by the State, were formed for the purpose. By the end of 1859 contracts had been entered into with eight companies for the construction of 5,000 miles of line, involving a guaranteed capital of £52 millions. These companies were (1) the East Indian; (2) the Great Indian Peninsula; (3) the Madras; (4) the Bombay, Baroda and Central India; (5) the Eastern Bengal; (6) the Indian Branch, now the Oudh and Rohilkund State Railway; (7) the Sind, Punjab and Delhi, now merged in the North Western State Railway; (8) the Great Southern of India, now the South Indian Railway. The scheme laid the foundations of the Indian Railway system as it exists to-day.

Early Disappointments.

The main principle in the formation of these companies was a Government guarantee on their capital, for this was the only condition on which investors would come forward. This guarantee was five per cent. coupled with the free grant of all the land required; in return the companies were required to share the surplus profits with the Government, after the guaranteed interest had been met; the interest charges were calculated at 22*d*. to the rupee; the Railways were to be sold to Government on fixed terms at the close of twenty-five years and the Government were to exercise close control over expenditure and working. The early results were disappointing. Whilst the Railways greatly increased the efficiency of the administration, the mobility of the troops, the trade of the country, and the movement of the population, they failed to make profits sufficient to meet the guaranteed interest. Some critics attributed this to the unnecessarily high standard of construction adopted, and to the engineers' ignorance of local conditions; the result was that by 1869 the deficit on the Railway budget was Rs. 166½ lakhs. Seeking for some more economical method of construction; the Government secured sanction to the building of lines by direct State Agency, and funds were allotted for the purpose, the metre-gauge being adopted for cheapness. Funds soon lapsed and the money available had to be diverted to converting the Sind and Punjab lines from metre to broad-gauge for strategic reasons. Government had therefore again to resort to the system of guarantee, and the Indian Midland (1882-85), since absorbed by the Great Indian Peninsula; the Bengal-Nagpur (1883-87) the Southern Maratha (1882); and the Assam Bengal (1891) were constructed under guarantees, but on easier terms than the first companies. Their total length was over 4,000 miles.

Famine and Frontiers.

In 1879, embarrassed by famine and by the fall of the exchange value of the rupee, Government again endeavoured to enlist unaided private enterprise. Four companies were promoted:—the Nilgiri, the Delhi-Umballa-Kalka, the Bengal Central, and the Bengal North-Western. The first became bankrupt, the second and third received guarantees, and the Tirhut Railway had to be leased to the fourth. A step of even greater importance was taken when Native States were invited to undertake construction in their own territories, and the Nizam's Government guaranteed the interest on 330 miles of line in the State of Hyderabad. This was the first of the large system of Native State Railways. In the first period up to 1870, 4,255 miles were opened, of which all save 45 were on the broad-gauge; during the next ten years there were opened 4,239, making the total 8,494 (on the broad-gauge 6,562, the metre 1,865, and narrow 67). Then ensued a period of financial ease. It was broken by the fall in exchange and the costly lines built on the frontier. The Penjdeh incident, which brought Great Britain and Russia to the verge of war, necessitated the connection of our outposts at Quetta and Chaman with the main trunk lines. The sections through the desolate Harnai and Bolan Passes were enormously costly; it is said that they might have been ballasted with rupees; the long tunnel under the Khojak Pass added largely to this necessary, but unprofitable, outlay.

Rebate Terms Established.

This induced the fourth period—the system of rebates. Instead of a gold subsidy, companies were offered a rebate on the gross earnings of the traffic interchanged with the main line, so that the dividend might rise to four per cent. but the rebate was limited to 20 per cent. of the gross earnings. Under these conditions, there were promoted the Ahmedabad-Prantej, the South Behar, and the Southern Punjab, although only in the case of the first were the terms strictly adhered to. The Barsi Light Railway, on the two feet six inches gauge, entered the field without any guarantee, and with rolling stock designed ot illustrate the carrying power of this gauge. The rebates terms being found unattractive in view of the competition of 4 per cent. trustee stocks; they were revised in 1896 to provide for an

absolute guarantee of 3 per cent. with a share of surplus profits, or rebate up to the full extent of the main line's net earnings in supplement of their own net earnings, the total being limited to 3½ per cent. on the capital outlay. Under these terms, a considerable number of feeder line companies was promoted, though in none were the conditions arbitrarily exacted. As these terms did not at first attain their purpose, they were further revised, and in lieu was substituted an increase in the rate of guarantee from 3 to 3½ per cent. and of rebate from 3½ to 5 per cent. with equal division of surplus profits over 5 per cent. in both cases. At last, the requirements of the market were met, and there was for a time a mild boom in feeder railway construction and the stock of all the sound companies promoted stood at a substantial premium. Conditions changed after the war and the Acworth Committee so far from approving of this system, considered that the aim of the Government should be to reduce by amalgamation the number of existing companies and that it should only be in cases where the State cannot or will not provide adequate funds that private enterprise in this direction should be encouraged.

The existing Branch Line Companies have ceased for some time to raise additional capital for capital requirements. They have either obtained overdrafts from various Banks for this purpose at heavy rates of interest or issued debentures at special rates of interest (usually about 7 per cent.) or in several cases asked for money to be advanced to them by the Railway Board. So far, therefore, from reducing the amount that the Government of India have to raise in the open market, they were increasing the amount. For the above reasons, the Government of India have abolished this system and are now prepared themselves to find the capital required for the construction of extensions or branches to existing main line systems. They have also announced their readiness to consider the question of constructing branch or feeder lines which were not expected to be remunerative from the point of view of railway earnings upon a guarantee against loss from a Local Government or local authority which might desire to have such lines constructed for purely local reasons or on account of administrative advantages likely to accrue in particular areas. This proposal was put forward as affording a suitable method of reconciling the interests of the Central and the Local Governments and of providing for local bodies and for Local Governments a method of securing the construction of railways which may be required for purely local reasons and which, while not likely to prove remunerative on purely railway earnings, are likely to give such benefits to Local Governments and local bodies as will more than repay the amounts paid under the guarantee. Some such arrangements have already been made with Local Government in Madras, Punjab, Burma and Bombay.

Railway Profits Commence.

Meantime a much more important change was in progress. The gradual economic development of the country vastly increased the traffic, both passenger and goods. The falling in of the original contracts allowed Government to renew them on more favourable terms. The development of irrigation in the Punjab and Sind transformed the North-Western State Railway. Owing to the burden of maintaining the unprofitable Frontier lines, this was the Cinderella Railway in India—the scapegoat of the critics who protested against the unwisdom of constructing railways from borrowed capital. But with the completion of the Chenab and Jhelum Canals, the North-Western became one of the great grain lines of the world, choked with traffic at certain seasons of the year and making a large profit for the State. In 1900 the railways for the first time showed a small gain to the State. In succeeding years the net receipts grew rapidly. In the four years ended 1907-08 they averaged close upon £2 millions a year. In the following year there was a relapse. Bad harvests in India, accompanied by the monetary panic caused by the American financial crisis, led to a great falling off in receipts just when working expenses were rising, owing to the general increase in prices. Instead of a profit, there was a deficit of £1,240,000 in the railway accounts for 1908-09. But in the following year there was a reversion to a profit, and the net Railway gain has steadily increased. For the year ended March 1919 this gain amounted to £10,573,000. Although in a country like India, where the finances are mainly dependent upon the character of the monsoon, the railway revenue must fluctuate, there was no reason to anticipate a further deficit, but the net railway gain decreased to £3,767,000 in 1920-21 and there was an actual loss of £6,182,000 in 1921-22. As a result of the steps taken by the Railway Board, however, on the report of the Acworth Committee in 1921, this loss was changed into a gain of £813,000 in 1922-23 and this was further increased to a gain of £4,275,000 in 1923-24, of £8,579,800 in 1924-25 and of £5,796,000 in 1925-26. Thanks to the separation of the Railway from the General Finances which is described later, and provided that the present railway policy is not influenced too much by political considerations, railways should continue to show a net yearly gain.

Contracts Revised.

One factor which helped to improve the financial position was the revision of the original contracts under which the guaranteed lines were constructed. The five per cent. dividend, guaranteed at 22*d*. per rupee, and the half-yearly settlements made these companies a drain on the State at a time when their stock was at a high premium. The first contract to fall in was the East Indian, the great line connecting Calcutta with Delhi and the Northern provinces. When the contract lapsed, the Government exercised their right of purchasing the line, paying the purchase-money in the form of terminable annuities, derived from revenue, carrying with them a sinking fund for the redemption of capital. The railway thus became a State line; but it was released to the Company which actually works it. Under these new conditions the East Indian Company brought to the State in the ten years ended 1909 after meeting all charges, including the payments on account of the terminable annuity by means of which the

purchase of the line was made, and interest of all capital outlay subsequent to the date on purchase, a clear profit of nearly ten millions. At the end of seventy-four years from 1880, when the annuity expires, the Government will come into receipt of a clear yearly income of upwards of £2,700,000, equivalent to the creation of a capital of sixty to seventy millions sterling. No other railway shows results quite equal to the East Indian, because, in addition to serving a rich country by an easy line, it possesses its own collieries and enjoys cheap coal. But with allowance for these factors, all the other guaranteed companies which have been acquired under similar conditions as their contracts expired, have proportionately swelled the revenue and assets of the State. It is difficult to estimate the amount which must be added to the capital debt of the Indian railways in order to counterbalance the loss during the period when the revenue did not meet the interest charges. According to one estimate it should be £50 millions. But even if that figure be taken, Government have a magnificent asset in their railway property.

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Government Control and Re-organisation of Railway Board.

As the original contracts carried a definite Government guarantee of interest, it was necessary for Government to exercise strong supervision and control over the expenditure during construction, and over management and expenditure after the lines were open for traffic. For these purposes a staff of Consulting Engineers was formed, and a whole system of checks and counterchecks established, leading up to the Railway Branch of the Public Works Department of the Government of India. As traffic developed, the Indian Railways outgrew this dry nursing, and when the original contracts expired, and the interests of Government and the Companies synchronised, it became not only vexatious but unnecessary. Accordingly in 1901-02 Mr. Thomas Robertson was deputed by the Secretary of State to examine the whole question of the organization and working of the Indian Railways, and he recommended that the existing system should be replaced by a Railway Board, consisting of a Chairman and two members with a Secretary. The Board was formally constituted in March 1905. The Board was made subordinate to the Government of India in which it was represented by the Department of Commerce and Industry. It prepared the railway programme of expenditure and considered the greater questions of policy and economy affecting all the lines. Its administrative duties included the construction of new lines by State agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, the settlement of disputes between lines, the control and promotion of the staff on State lines, and the general supervision over the working and expenditure of the Company's lines. Two minor changes have taken place since the constitution of the Railway Board. In 1908, to meet the complaint that the Board was subjected to excessive control by the Department of Commerce and Industry, the powers of the Chairman were increased and he was given the status of a Secretary to Government with the right of independent access to the Viceroy; he usually sits in the Imperial Legislative Council as the representative of the Railway interest. In 1912 in consequence of complaints of the excessive interference of the Board with the Companies, an informal mission was undertaken by Lord Inchcape to reconcile differences. Various changes were introduced during the years 1912-1920 such as the modification of the rule that the President and members of the Railway Board should all be men of large experience in the working of railways due to the importance of financial and commercial considerations in connection with the control of Indian Railway policy. This decision was, however, revised in 1920 and an additional appointment of Financial Adviser to the Railway Board created instead. The question of the most suitable organization was further fully examined by the Acworth Committee in 1921

absolute guarantee of 3 per cent. with a share of surplus profits, or rebate up to the full extent of the main line's net earnings in supplement of their own net earnings, the total being limited to 3½ per cent. on the capital outlay. Under these terms, a considerable number of feeder line companies was promoted, though in none were the conditions arbitrarily exacted. As these terms did not at first attain their purpose, they were further revised, and in lieu was substituted an increase in the rate of guarantee from 3 to 3½ per cent. and of rebate from 3½ to 5 per cent. with equal division of surplus profits over 5 per cent. in both cases. At last, the requirements of the market were met, and there was for a time a mild boom in feeder railway construction and the stock of all the sound companies promoted stood at a substantial premium. Conditions changed after the war and the Acworth Committee so far from approving of this system, considered that the aim of the Government should be to reduce by amalgamation the number of existing companies and that it should only be in cases where the State cannot or will not provide adequate funds that private enterprise in this direction should be encouraged.

The existing Branch Line Companies have ceased for some time to raise additional capital for capital requirements. They have either obtained overdrafts from various Banks for this purpose at heavy rates of interest or issued debentures at special rates of interest (usually about 7 per cent.) or in several cases asked for money to be advanced to them by the Railway Board. So far, therefore, from reducing the amount that the Government of India have to raise in the open market, they were increasing the amount. For the above reasons, the Government of India have abolished this system and are now prepared themselves to find the capital required for the construction of extensions or branches to existing main line systems. They have also announced their readiness to consider the question of constructing branch or feeder lines which were not expected to be remunerative from the point of view of railway earnings upon a guarantee against loss from a Local Government or local authority which might desire to have such lines constructed for purely local reasons or on account of administrative advantages likely to accrue in particular areas. This proposal was put forward as affording a suitable method of reconciling the interests of the Central and the Local Governments and of providing for local bodies and for Local Governments a method of securing the construction of railways which may be required for purely local reasons and which, while not likely to prove remunerative on purely railway earnings, are likely to give such benefits to Local Governments and local bodies as will more than repay the amounts paid under the guarantee. Some such arrangements have already been made with Local Government in Madras, Punjab, Burma and Bombay.

Railway Profits Commence.

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and a revised organization which is described later was introduced from 1st April 1924.

Some of the difficulties involved in the constitution of a controlling authority for the railways of India may be realized from a study of the "Notes on the Relation of the Government to Railways in India" printed as an appendix to the Railway Administration report for 1922-23. These notes bring out the great diversity of conditions prevailing which involve the Railway Department in the exercise of the junctions of —

(a) the directly controlling authority of the three State-worked systems aggregating 15,414 miles in 1925,

(b) the representative of the predominant owning partner in systems aggregating 27,325 miles,

(c) the guarantor of many of the smaller companies, and

(d) the statutory authority over all railways in India.

Moreover in all questions relating to railways or extra municipal tramways in which Provincial Governments are concerned, the Railway Department is called upon to watch the interests of the Central Government and is frequently asked to advise the Local Governments. Its duties do not end there. The future development of railways depends largely on the Government of India and the Railway Department is therefore called upon to plan out schemes of development, to investigate and survey new lines and to arrange for financing their construction. The statement of the varied responsibilities of the Government of India in regard to railways might be extended almost indefinitely. It will perhaps be sufficient to mention only the complications that may and do arise owing to the very considerable railway mileage in Indian States. In the exercise of all these functions the Railway Department is a Department of the Government of India, its policy must be in accord with the policy of the Government as a whole and every decision must be made with that consideration in mind. The evolution of a satisfactory authority for the administration of these varied functions has proved extremely difficult and the question was one of those referred to the Railway Committee (1920-21) presided over by Sir William Acworth who expressed the unanimous opinion that material changes were necessary in the constitution of the Railway Board. Amongst their recommendations they advised the early appointment of a Chief Commissioner of Railways whose first duty should be to prepare a definite scheme for the reorganization of the Railway Department and Mr. C. D. M. Hindley, formerly Agent of the East Indian Railway and Chairman of the Calcutta Port Trust, was appointed Chief Commissioner on November 1st, 1922.

The principal constitutional change involved in this appointment is that the Chief Commissioner who takes the place of the President of the Railway Board is solely responsible—under the Government of India—for arriving at decisions on technical matters and for advising the Government of India on matters of railway policy and is not, as was the President, subject to be out-voted and over-ruled by his colleagues on the Board. The detailed re-organization of the Railway Board in accordance with the Chief Commissioner's proposals required careful consideration but one of the most important of his recommendations namely the appointment of a Financial Commissioner was considered of particular urgency and the Secretary of State's sanction was therefore obtained to the appointment with effect from 1st April 1923. While in the person of the Chief Engineer the Railway Board has always had available the technical advice of a senior Civil Engineer in Mechanical Engineering questions it has had to depend on outside assistance. The disadvantages of this arrangement have become increasingly evident and it was therefore decided with effect from November 1st, 1922, to create the new appointment of Chief Mechanical Engineer with the Railway Board.

The reorganization carried out in 1924 had for one of its principal objects the relief of the Chief Commissioner and the Members from all but important work so as to enable them to devote their attention to larger questions of railway policy and to enable them to keep in touch with Local Governments, railway administrations and public bodies by touring to a greater extent than they had been able to do in the past. This object was effected by placing a responsible Director at the head of each of the main branches of the Board's work, namely, Civil Engineering, Mechanical Engineering, Traffic and Establishment. The former Chief Engineer and the Chief Mechanical Engineer, who had been employed mainly in cultivative work, became Directors and together with the Directors of Traffic and Establishment have been made responsible for the direct disposal of the work of their branches under the general orders of the Railway Board.

The posts of Joint Secretary and 4 Assistant Secretaries were replaced by 6 Deputy Directors working under the Directors and in charge of branches dealing with Establishment, Works, Projects, Stores, Statistics and Traffic. One Assistant Director was also added to supervise the Technical Branch and the Drawing Office. The disposal of the general work of the Railway Board was provided for by the continuance of the post of Secretary in whose name all letters and orders of the Board are issued. The position of the Board as a Department of the Government of India has been maintained and it works under the Member for Commerce and Railway. As already stated the Chief Commissioner is the Secretary to the Government of India in the Railway Department and orders issued by the Board over the signature of the Secretary are orders of the Government of India.

Experience of the working of this organization during 1924-25 and the decision agreed to by the Legislative Assembly in September 1924 to separate railway finances from the general finances of the country made it necessary to appoint a Deputy Director and an Assitant Director of Finance. An Assistant Director of Statistics was also added during that year. Later a Director of Finance was added to the establishment occupying, as regards disposal of work, the same position as the Directors referred to above.

Further experience of the reduction of work resulting from the large delegation of powers and responsibility to the Agents of State-managed Railways and the Board of Directors of Company-managed railways enabled a re-arrangement of work to be made during 1925-26 accompanied by a reduction in the staff. Under this rearrangement the posts of 3 Deputy Directors, an Assistant Director and the Assistant Secretary were held in abeyance. The personal work was transferred from the Directors of Establishment to the Secretary and a temporary post of Deputy Secretary was created. Further a separate technical office was established to take charge of the technical work of the engineering branches. The Technical Officer also acts as *ex-officio* Secretary to the permanent Standardization Committees which have been appointed to deal progressively with all questions of standards of equipment.

The present superior staff under the Railway Board, therefore, consists of 5 Directors, 4 Deputy Directors, a Technical Officer, 2 Assistant Directors, a Secretary and a Deputy Secretary.

The question of transferring the supervision of railway accounts of State Railways from the Finance Department to the Railway Board has been under consideration for some time and in accordance with a resolution adopted, by the Legislative Assembly in September 1925, a start has been made with the transfer of the supervision of railway accounts on the East Indian Railway. At the same time a separate Audit Staff has been appointed reporting directly to the Auditor-General. If the revised procedure proves a success, it will probably be extended to other State Railways.

Management.

The Railways managed by Companies have Boards of Directors in London and are represented in India by an Agent. The Company managed railways are generally organised on a departmental basis with a Traffic Manager, Chief Engineer, Locomotive and Carriage and Wagon Superintendent, Controller of Stores and Chief Auditor, while the State managed lines have generally adopted the divisional organisation with a Chief Operating Superintendent, Chief Commericial Manager, Chief Engineer, Chief Mechinical Engineer, Controller of Stores and Chief Auditor.

Clearing Accounts Office.

It was stated in last year's Administration Report that a Clearing Accounts Office, with a Statutory Audit Office attached thereto, was opened in December 1926 to take over work relating to the check and apportionment of traffic interchanged between State-managed Railways. The work of the different railways was gradually transferred to this office, the North Western Railway being taken over first on the 1st January 1927, the East Indian Railway following on the 1st April, and the Eastern Bengal Railway on the 1st January 1928. The Great Indian Peninsula Railway work was not transferred till after the close of the year.

At the request of the Bombay, Baroda and Central India Railway an exhaustive experiment was conducted to check the accuracy of the results obtained by the revised procedure, and as the experiment was completely successful, the Board of Directors of the Bombay, Baroda & Central India Railway have recently agreed to the transfer of the check and apportionment of their foreign traffic to the Clearing Accounts Office.

During the year under review demonstrations explaining the Clearing Accounts Office procedure were given to the representatives of the Press as well as to the representatives of the various railways who visited the office to study the new procedure. An important demonstration was given to the representatives of the Southern Railways at Madras who were so impressed with the superiority of the new procedure that they unanimously recommended to their Home Boards the transfer of the work of check and apportionment of earnings from interchanged traffic to the Clearing Accounts Office, and it is hoped that a branch Clearing Accounts Office will be opened at Madras early in 1929 to deal with such traffic.

The Railway Conference.

In order to facilitate the adjustment of domestic questions, the Railway Conference was instituted in 1876. This Conference was consolidated into a permanent body in 1903 under the title of the Indian Railway Conference Association. It is under the direct control of the railways, it elects a President from amongst the members, and it has done much useful work.

The Indian Gauges.

The standard gauge for India is five feet six inches. When construction was started the broad-gauge school was strong, and it was thought advisable to have a broad-gauge in order to resist the influence of cyclones. But in 1870; when the State system was adopted it was decided to find a more economical gauge, for the open lines had cost £17,000 a mile. After much deliberation, the metre-gauge of 3 feet 3⅜ inches was adopted, because at that time the idea of adopting the metric system for India was in the air. The original intention was to make the metre-gauge lines provisional; they were to be converted into broad-gauge as soon as the traffic justified it; consequently they were built very light. But the traffic expanded with surprising rapidity, and it was found cheaper to improve the carrying power of the metre-gauge lines than to convert them to the broad-gauge. So, except in the Indus Valley, where the strategic situation demanded an unbroken gauge, the metre gauge lines were improved and they became a permanent feature in the railway system. Now there is a great metre-gauge system north of the Ganges connected with the Rajputana lines and Kathiawar. Another System in Southern India embracing the Southern Maratha and the South India Systems. These are not yet connected, but the necessary link from Khandwa by way of the Nizam's Hyderabad-Godaveri Railway, cannot be long delayed. All the Burma lines are on the metre-gauge. Since the opening of the Barsi line, illustrating the capacity of the two feet six inch gauge; there has been developed a tendency to construct feeders on this rather than on the metre-gauge.

The following statement brings out the more important features of the operation of Indian railways during the year 1927-28 together with similar information for the year 1926-27:—

		1926-27.	1927-28.
Mileage open on the 31st March—			
1. Single line		35,542·41	36,156·09
2. Double line or more		3,506·47	3,555·49
3. Total route mileage		39,048·88	39,711·58
4. Total track mileage		52,886·27	53,846·48
Capital and Revenue Earnings and Expenditure—			
5. Total capital at charge including ferries and suspense on open line	Rs.	7,88,66,66,000	8,22,86,25,000
6. Gross earnings	"	1,12,35,66,000	1,18,22,17,000
7 Gross earnings per train mile	"	6·58	6·58
8. Working expenses	"	69,70,08,000	72,30,76,000
9. Working expenses per train mile	"	4·08	4·02
10. Net earnings	"	42,65,58,000	45,91,41,000
11. Percentage of working expenses to gross earnings.		62·04	61·16
12. Percentage of net earnings on total capital outlay.		5·41	5·58
Equipment—			
13. Locomotives		9,873	9,554
14. Passenger carriages		20,599	20,112
15. Other passenger vehicles		5,879	5,406
16. Goods stock		2,30,726	228,271
Rail motors		..	32
Steam coaches		..	21
Electric motor coaches and trailors		..	213
Passenger Traffic—			
17. Number of passengers carried		6,04,371,800	623,114,800
18. Passenger miles		20,366,250,000	21,704,290,000
19. Average journey	Miles.	33·7	34·8
20. Earnings from passengers carried	Rs.	38,11,89,000	39,17,95,000
21. Average rate charged per passenger per mile	Pies.	3·59	3·47
22. Total coaching earnings	Rs.	44,48,35,000	45,67,39,000
Goods Traffic—			
23. Number of tons carried		85,833,000	89,791,000
24. Net ton miles		20,374,679,000	21,902,222,000
25. Average haul		239·4	243·9
26. Earnings from tonnage carried	Rs.	65,00,65,000	69,39.99,000
27. Average rate charged for carrying a ton of goods one mile	Pies.	6·12	6·08
28. Total goods earnings		65,35,63,000	69,58,32,000
Number of employees		772,563	800,102

At the close of the year 1927-28, the total capital invested in railways was Rupees 8,22,86,25,000 represented by a property which in terms of route mileage amounted to 39,712 miles of railway. This property brought in to the owners a return of 5·58 per cent. on the capital at charge. Similar figures for the railways owned by the State are:—

	Rs.
Total capital at charge	7,28,87,81,000
Total route mileage	28,426
Return on capital outlay	5·40

In 1926-27 there was a falling off of Rs. 179 lakhs in the net gain from the working of State-owned Railways due principally to enhanced interest charges amounting to 106 lakhs, to a decline in earnings of 66 lakhs and an increase in working expenses and other charges amounting to 26 lakhs.

State versus Company Management.—The relative advantages and disadvantages of State and Company management of the railways owned by Government which comprise the great bulk of the railway mileage in India have been the subject of discussion in official circles and the public press for many years. In India the question is complicated by the fact that the more important companies have not in recent years been the owners of the railways which they manage and the headquarters of their Boards are in London. The subject was one, perhaps the most important, of the terms of reference of the

Acworth Railway Committee. That Committee was unfortunately, unable to make a unanimous recommendation on this point, their members being equally divided in favour of State management and Company management. They were, however, unanimous in recommending that the present system of management by Boards of Directors in London should not be extended beyond the terms of the existing contracts and this recommendation has met with general public acceptance. During the year 1922-23, the question was again referred to certain Local Governments and public bodies and opinions collected and discussed. The approaching termination of the East Indian Railway contract on 31st December 1924 and of that of the Great Indian Peninsula Railway on 30th June 1925 rendered an early decision on this question imperatve. When the question was debated in the Legislative Assembly in February 1923, the non-official Indian Members were almost unanimously in favour of State management and indeed were able to carry a resolution recommending the placing of the East Indian Railway and the Great Indian Peninsula Railway under State management at the close of their present contracts. The Government of India, however, expressed themselves as being so convinced by the almost universal failure of this method in other countries that they proposed, while accepting tne necessity for taking over the managment of the East Indian Railway and the Great Indian Peninsula Railway to continue their efforts to devise a satisfactory form of Company domiciled in India to take these railways over eventually on a basis of real Company management. On 1st January 1925 the East Indian Railway was amalgamated with the Oudh and Rohilkhand Railway and brought under direct State Management while on 1st July 1925 the Great Indian Peninsula Railway followed suit. The Naini-Jubbulpore Section of the East Indian Railway was transferred to the Great Indian Peninsula Railway on 1st October 1925.

Termination of the Contract with the Burma Railways Co.—After the transfer of the East Indian and the Great Indian Peninsula Railway to State management, the next State-owned company managed railway system to fall due for the termination of contract is the Burma Railways. The contract for this line being terminable on the 31st December 1928 notice had to be given before 31st December 1927 and the future management of the line engaged the attention of the Government during the year under review. After careful consideration, and having full regard to the views of the Government and the Legislative Council of Burma who expressed themselves in favour of State-management, it was decided, with the approval of the Secretary of State to take over the BurmaRailways for management by the State after the termination of the present contract with the Burma Railways Company on the 3st December 1928. While the transfer of the line to State-management will entail the payment to the Burma Railways Company of a sum of £ 3,000,000 it is likely to result in an increase in net annual revenue of about half a crore to Government.

Separation of the Railway from the General Finances.—The question of the separation of the railway from the general finances has been under consideration for some time and as a result of the recommendations of the Acworth Committee in 1921, the question was further examined by the Railway Finance Committee and the Legislative Assembly but it was decided to postpone a definite decision for the present.

The question was examined afresh in connection with the recommendation of the Retrenchment Committee in 1923, that the railways in India should be so worked as to yield an average return of at least 5½ per cent. on the capital at charge and it was decided that a suitable time had arrived when this separation could be carried out. A resolution was accordingly introduced in the Assembly on the 3rd March 1924, recommending to the Governor-General in Council:— "that in order to relieve the general bud get from the violent fluctuations caused by the incorporation therein of the railway estimates and to enable the railway to carry out a continuous railway policy based on the necessity of making a definite return over a period of years to the State on the Capital expended on railways:—

(1) The railway finances shall be separated from the general finances of the country and the general revenues shall receive a definite annual contribution from railways which shall be the first charge on railway earnings.

(2) The contribution shall be a sum equal to five-sixths of 1 per cent. on the capital at charge of the railways (excluding capital contributed by Companies and Indian States and Capital expenditure on strategic Railways) at the end of the penultimate financial year *plus* one-fifth of any surplus profits remaining after payment of this fixed return, subject to the condition that if any year railway revenues are insufficient to provide the percentage of five-sixths of 1 per cent. on the capital at charges surplus profits in the next or subsequent years, will not be deemed to have accrued for purposes of division until such deficiency has been made good. From the contribution so fixed will be deducted the loss in working, and the interest on capital expenditure on strategic lines.

(3) Any surplus profits that exist after payment of these charges shall be available for the Railway administration to be utilised in

(*a*) forming reserves for.

(*i*) equalising dividends, that is to say, or securing the payment of the percentage contribution to the general revenues in lean years,

(*ii*) depreciation,

(*iii*) writing down and writing off capital,

(*b*) the improvement of services rendered to the public,

(*c*) the reduction of rates.

(4) The railway administration shall be entitled, subject to such conditions as may be prescribed by the Government of India, to borrow temporarily from capital or from the reserves for the purpose of meeting expenditure for which there is no provision or insufficient provision in the revenue budget subject to the obligation to make repayment of borrowings out of the revenue budgets of subsequent years.

The following statement brings out the more important features of the operation of Indian railways during the year 1927-28 together with similar information for the year 1926-27:—

		1926-27.	1927-28.
Mileage open on the 31st March—			
1. Single line		35,542·41	36,156·09
2. Double line or more		3,506·47	3,555·49
3. Total route mileage		39,048·88	39,711·58
4. Total track mileage		52,886·27	53,846·48
Capital and Revenue Earnings and Expenditure—			
5. Total capital at charge including ferries and suspense on open line	Rs.	7,88,66,66,000	8,22,86,25,000
6. Gross earnings	"	1,12,35,66,000	1,18,22,17,000
7 Gross earnings per train mile	"	6·58	6·58
8. Working expenses	"	69,70,08,000	72,30,76,000
9. Working expenses per train mile	"	4·08	4·02
10. Net earnings	"	42,65,58,000	45,91,41,000
11. Percentage of working expenses to gross earnings.		62·04	61·16
12. Percentage of net earnings on total capital outlay.		5·41	5·58
Equipment—			
13. Locomotives		9,873	9,554
14. Passenger carriages		20,599	20,112
15. Other passenger vehicles		5,879	5,406
16. Goods stock		2,30,726	228,271
Rail motors		..	32
Steam coaches		..	21
Electric motor coaches and trailors		..	213
Passenger Traffic—			
17. Number of passengers carried		6,04,371,800	623,114,800
18. Passenger miles		20,366,250,000	21,704,290,000
19. Average journey	Miles.	33·7	34·8
20. Earnings from passengers carried	Rs.	38,11,89,000	39,17,95,000
21. Average rate charged per passenger per mile	Pies.	3·59	3·47
22. Total coaching earnings	Rs.	44,48,35,000	45,67,39,000
Goods Traffic—			
23. Number of tons carried		85,833,000	89,791,000
24. Net ton miles		20,374,679,000	21,902,222,000
25. Average haul		239·4	243·9
26. Earnings from tonnage carried	Rs.	65,60,65,000	69,39,99,000
27. Average rate charged for carrying a ton of goods one mile	Pies.	6·12	6·08
28. Total goods earnings		65,35,63,000	69,58,32,000
Number of employees		772,563	800,102

At the close of the year 1927-28, the total capital invested in railways was Rupees 8,22,86,25,000 represented by a property which in terms of route mileage amounted to 39,712 miles of railway. This property brought in to the owners a return of 5·58 per cent. on the capital at charge. Similar figures for the railways owned by the State are:—

	Rs.
Total capital at charge	7,28,87,81,000
Total route mileage	28,426
Return on capital outlay	5·40

In 1926-27 there was a falling off of Rs. 179 lakhs in the net gain from the working of State-owned Railways due principally to enhanced interest charges amounting to 106 lakhs, to a decline in earnings of 66 lakhs and an increase in working expenses and other charges amounting to 26 lakhs.

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(5) In accordance with present practice the figures of gross receipts and expenditure of railways will be included in the Budget Statement. The proposed expenditure will, as at present, be placed before the Legislative Assembly in the form of a demand for grants and on a separate day or days among the days allotted for the discussion of the demands for grants the Member in charge of the Railways will make a general statement on railway accounts and working. Any reductions in the demand for grants for railways resulting from the votes of the Legislative Assembly will not ensure to general revenues, *i.e.*, will not have the effect of increasing the fixed contribution for the year.

(6) The Railway Department will place the estimate of railway expenditure before the Central Advisory Council on some date prior to the date for the discussion of the demand for grants for railways."

When introducing this resolution the Hon'ble Member for Commerce stated that it had been represented to him that there was a general feeling in the House that before the House was asked to commit itself to those proposals, it should be allowed to refer them to a committee of the House. He further stated that he had no objection to this course provided that the committee met rapidly. This was agreed to and members were appointed.

The committee met twice and considered the resolution but was not able within the time allowed to satisfy itself fully as to the effect of the proposals in the resolution on the control of the Assembly over railway finance and policy and as to the amount and form of contribution to be paid by the railways to general revenues. In the circumstances, the committee recommended that the consideration of the resolution be adjourned till the autumn session to allow the committee further time for examination. Government raised no objection to this proposal and it was agreed to by the Assembly.

The resolution was further examined by the Standing Finance Committee in September and as a result of the views expressed by the committee and in the Assembly certain modifications were introduced. The final resolution agreed to by the Assembly on September 20th, 1924, and accepted by Government differed from the original resolution in that the yearly contribution had been placed at 1 per cent. instead of 5/6th per cent. on the capital at charge and if the surplus remaining after this payment to General Revenues should exceed 3 crores, only ⅔rd of the excess over 3 crores were to be transferred to the Railway Reserve and the remaining ⅓rd was to accrue to General Revenues. At the same time a Standing Finance Committee for Railways was to be constituted to examine the estimate of railways expenditure and the demand for grants, the programme revenue expenditure being shown under a depreciation fund. This committee was to consist of one nominated official member of the Legislative Assembly as Chairman and 11 members elected by the Legislative Assembly from that body. This would be in addition to the Central Advisory Council which will include the Members of the Standing Finance Committee and certain other official and non-official members from the Legislative Assembly and Council of State. These arrangements were to be subject to periodic revision but to be provisionally tried for at least 3 years. They would, however, only hold good as long as the E. I. Railway and the G. I. P. Railway and existing State Managed Railways remain under State-management and if any contract for the transfer of any of the above to Company management was concluded against the advice of the Assembly, the Assembly would be at liberty to terminate the arrangements in this resolution.

The Assembly in an addendum recommended that the railway services and the Railway Board should be rapidly Indianised and that the stores for the State Managed Railways should be purchased through the organisation of the Indian Stores Department.

Re-organisation problems.—The growing complexity of railway administration in India and the evolution of new methods of controlling traffic have given a stimulus to the efforts of various railways to revise their organisations. The general direction in which this re-organisation is being considered is that of consolidation into one department of the operating or transportation work of the railway, including the provision of power. This system which is commonly known as the divisional system, was first adopted on the Great Indian Peninsula Railway during 1922-23 and entailed :—

(*a*) the separation of the commercial and operative duties of the Traffic Department,

(*b*) the separation of the mechanical and running duties of the Locomotive Department,

(*c*) the fusion of the operative duties of the Traffic Department with the running duties of the Locomotive Department.

Under the new organisation there is now—

(1) a Chief Transportation Superintendent in charge of all operating functions,

(2) a Chief Traffic Manager in charge of the commercial side of the railway,

(3) a Chief Mechanical Engineer in charge of the design and construction of rolling stock and of all repairs and renewals of rolling stock carried out in the central workshops.

This organisation is more or less similar to the divisional organisation found on most American Railways with the exception that the Engineering Department still works on a departmental basis. This, however, is being changed and the maintenance of Way and Works is being brought into the divisional organisation while new construction will still remain outside.

A somewhat similar organisation was introduced on the North-Western Railway from 1st October 1924, except that it follows rather the organisation in force on the South African Railways where the railways are divided into a number of areas or divisions each under one chief officer and all reporting to the General Manager who is assisted by a number of principal officers in charge of definite phases of the working. A similar organisation was also introduced on the East Indian and Oudh and Rohilkhand Railways early in 1925.

Investigation into the present form of Railway Accounts.—Mention was made in last year's report of the investigation by Sir

Arthur Dickinson into the system of accounts followed on Indian railways. Sir Arthur Dickinson completed his investigation in March 1927 and submitted his report in August 1927. His recommendations which are of a far reaching character are at present under consideration.

The Standing Finance Committee.—The Standing Finance Committee for Railways met 12 times in the course of the year. The first two meetings were held on the 6th and 7th June 1927 at Bombay where the Committee examined the programmes of Railways for the purchase of rolling stock in 1928-29 and approved of the creation of several superior appointments and the construction of two new lines and a metre gauge bridge over the Irrawaddy river at Sagaing. The next two meetings were held at Calcutta on the 1st and 2nd August 1927 and at these the Committee discussed and approved of the construction of several new lines, including a broad gauge line from Lucknow *via* Sultanpur to Jaunpur and a metre gauge line from Trichinopoly *via* Karaikudi to Manamadura, and the creation of certain appointments on the South Indian Railway. At the fifth meeting, which was held at Simla on the 17th September 1927, the Committee further considered and accepted the detailed rolling stock programmes of Railways for 1928-29 and also approved of proposals for the creation of certain additional posts on the superior establishment of Railways, the revision of the cadre of the Superior Loco. and Carriage and Wagon establishment on the Bengal Nagpur Railway, the creation of a Production and Progress Department in the Bombay, Baroda and Central India Railway workshops at Ajmer and Parel, the remodelling of the Jhansi workshops and the formation of a College at Dehra Dun for railway staff. The Committee next met at Madras and at its meetings held on the 22nd and 23rd November 1927 examined and approved of the programmes of capital expenditure and expenditure from the Depreciation Fund of Railways for the year 1928-29, and the proposals for advance grants for general purposes stores for that year, the revision of the cadre of the superior electrical engineering establishment of the Eastern Bengal Railway, the creation of certain appointments including that of a Chief Medical Officer on the North Western Railway and the construction of several new lines including a line from Salem *via* Attor to Vriddhachalan and a system of branch lines in the Minbu and Pakkoku Districts in Burma. On the following day, *i.e.*, the 24th November 1927, the Committee inspected the existing station premises and yards at Erode and the lay out proposed for their remodelling. The last few meetings of the Committee were held at Delhi on the 26th, 27th and 28th January and 15th February 1928. At these meetings the Committees examined the estimates of receipts and expenditure and the demands for grants for Railwy for 1928-29 and the supplementary demands for 1927-28 prior to their being placed before the Legislative Assembly; they also discussed and approved of proposals for the revision of the superior traffic cadre of the Burma Railways, the creation of certain superior appointments, the electrification of the Madras suburban section of the South Indian Railway, the remodelling of the Erode Junction station and the construction of a chord line connecting Lyallpur with Chananwala and certain other new lines.

Imperial Indian Mail, Punjab Limited & P. & O. Express.—A new standard of travel in India was instituted in November 1926 by a weekly service between Bombay and Calcutta in connection with the English Mail steamers. The Imperial Indian Mail, as the train is called, is a joint service of the East Indian and Great Indian Peninsula Railways. The popularity of the train has been firmly established, and during the seasonal months the accommodation has been filled to capacity. The special features of this train are the provision of a parlour car, a compartment for luggage wanted on journey, bedding, the services of an experienced conductor and staff and high class catering. The train is vestibuled throughout, giving passengers access to all parts without the necessity of waiting for station halts. Accommodation is provided for 32 passengers in 14 two-berth and 4 single berth compartments. Seven of the two-berth compartments have two lower berths and the remainder a lower and an upper berth. The additional floor space in the latter compartments enables two easy-chairs to be provided. The exterior of the Imperial Indian Mail is finished in cream and gold, and the service as a whole compares favourably with the finest luxury train service provided by any railway in the world.

The success of this train naturally led to the introduction of similar services between Bombay and the north of India *via* Delhi and from October 7th, 1927, a special train called the Punjab Limited was inaugurated by the G.I.P. Railway for the benefit of overseas passengers travelling between Bombay and the Punjab. The train accommodates 48 passengers, each compartment having 3 berths, two lower and one upper, with an upper shelf for luggage. A cane easy-chair and carpets are provided in each compartment. The services of a train conductor are placed at the disposal of passengers, and bedding, blankets and pillows are provided at a cost of Rs. 5 per journey. The Punjab Limited is painted cream with gold lettering, and a special feature of the service lies in the accelerated timings. The journey from Bombay to Delhi is accomplished in 27 hours 15 minutes. The latest type of dining car, with special fittings such as bracket table lamps with silk shades, etc., is attached to this service.

From the same date the Bombay, Baroda and Central India Railway introduced in conjunction with the North Western Railway a new weekly train for first class long distance passengers and mails between Bombay and Peshawar connecting with the outward Mail steamers at Ballard Pier. This train reduced the time of the journey to Delhi and the Punjab as under :—

	Previous time.		New time.		Difference.	
	Hrs.	Mts.	H4s.	Mrs.	Hrs.	Mts.
Delhi ..	27	50	23	50	4	0
Lahore ..	39	5	32	0	7	5
Peshawar ..	51	55	42	35	9	20

With the close of the outward season, second class and local (1st & 2nd class) passengers were also carried on this train. The performance

of this train has been uniformly excellent and has been freely commented on by the Press both in India and in England. On two occasions, when the Mail steamer has been late, the run between Bombay and Delhi has been performed in 21 hours, or at an average speed of 41 miles per hour for the 865 miles. The running of this train has effected delivery of the English mails a day earlier in Delhi and in most places in the Punjab. From 1st September 1928 a new train, the Frontier Mail, will run daily from Bombay to Peshawar to approximately the same timings.

Earnings.—Of the total earnings on all Railways of Rs. 118,22 crores, Rs. 69,58 crores or 58.9 per cent. were from goods traffic, Rs. 39.18 crores or 33.1 per cent from passenger traffic and Rs. 9.46 crores or 8.0 per cent. from parcels, luggage and miscellaneous earnings.

Passenger Earnings.—Passenger earnings showed an increase of 2.77 per cent from Rs. 38.13 to Rs. 39.18 crores. The following table shows the numbers of and earnings from passengers separately for each class for the 4 years previous to the War and for the 5 latest years.

Year.	Number of passengers carried (in thousands)				
	1st Class.	2nd Class.	Inter	3rd Class.	Season & Vendor's tickets.
	Rs.	Rs.	Rs.	Rs.	Rs.
1910	685	2,784	10,702	3,15,839	24,341
1911	703	2,947	11,409	3,31,055	25,687
1912	700	3,030	10,508	3,56,789	26,810
1913-14	715	3,253	12,000	3,90,412	30,114
1923-24 †	1,199	10,128	11,374	5,44,622	..
1924-25 †	1,101	9,778	12,201	5,53,266	..
1925-26 †	1,033	9,901	13,602	5,74,608	..
1926-27 †	1,012	10,006	14,945	5,78,409	..
1927-28 †	981	9,963	17,351	5,94,821	..

Year.	Earnings from passengers (in thousands of rupees)				
	1st class.	2nd class.	Inter.	3rd class.	Season & vendor's tickets.
	Rs.	Rs.	Rs.	Rs.	Rs.
1910	58,82	77,23	94,99	14,65,16	15,85
1911	66,38	83,83	1,08,88	15,73,15	16,85
1912	62,90	83,31	91,37	17,01,35	17,55
1913-14	68,94	88,70	1,03,48	18,37,03	19,36
1923-24 †	1,31,17	2,02,73	1,41,10	33,32,82	..
1924-25 †	1,22,93	1,92,00	1,48,01	34,12,45	..
1925-26 †	1,20,42	1,89,42	1,59,61	34,76,45	..
1926-27 †	1,17,75	1,88,27	1,61,79	33,43,97	..
1927-28 †	1,13,71	1,95,67	1,69,32	34,39,25	..

† The number of season and vendor's tickets and their earnings included under the respectively classes; the former at the rate of 50 single journeys per month.

Rates Advisory Committee.

Mention was made in last year's report of the establishment of the Rates Advisory Committee to investigate and make recommendations to Government on the following subjects :—

(1) Complaints of undue preference ;

(2) Complaints that rates are unreasonable in themselves ;

(3) Complaints or disputes in respect of terminals ;

(4) The reasonableness or otherwise of any conditions as to the packing of articles specially liable to damage in transit or liable to cause damage to other merchandise ;

(5) Complaints in respect of conditions as to packing attached to a rate ;

(6) Complaints that Railways do not fulfil their obligations to provide reasonable facilities under Section 42 (3) of the Indian Railways Act.

At the end of 1926-27 there remained 5 cases outstanding with the Committee and 9 new cases were referred to the Committee during 1927-28. Up to 31st March 1928 the Committee had submitted their report on the following four cases :—

(1) Complaint of undue preference from the Grain merchants of Ajmere against the B. B. & C. I. Railway in the matter of concession rates for the carriage of food grains consigned to the B. B. & C. I. Railway Indian Co-operative Association, Ajmere.

(2) Complaint from the Central Province Portland Cement Company, against the G. I. P. Railway as regards the unreasonableness of the terminal charge levied on coal delivered at the siding leading to the Company's works at Jukehi.

(3) Complaint of the Amritsar Sugar Mills Co. against the E. I. and N. W. Railways that the rates for jagree from stations on the B. & N. W. Railway *via* Barabanki and Saharanpur to Amritsar were unreasonable.

(4) Complaint of undue preference from the Katni Lime Manufacturers Association against the G. I. P. Railway *re :* the rates for lime from Katni-Murwara to and *via* Naini for stations north and west of Naini.

As regards (1) the Committee recommended the withdrawal of the concession and this was agreed to by the Government of India. In the case of (2) the Committee were of opinion that the terminal charge at Jukehi should be remitted. This recommendation was not accepted by the Government of India. In the case of the Amritsar Sugar Mills Co., the Committee recommended that the N. W. Railway should quote a rate of .28 pies per maund per mile for jagree for refining purposes, subject to the ordinary terminal charge at destination. This was accepted with certain modifications. As regards the fourth case it was held by the Committee that the rates charged did not affect the complainants adversely, their real cause of grievance being delays to consignments. The Committee therefore had no recommendations to make as regards the rates.

Owing to the serious illness of Sir Narsimha Sarma, K.C.S.I., President of the Committee, the sittings of the Committee were temporarily suspended from 21st January 1928. The suspension of the sittings of the Committee, however, did not preclude the submission of applications to the Railway Department and Agents of Railways in accordance with the procedure in force. Preliminary enquiries in connection with such applications continued to be made and those of them which were to be submitted to the Committee were sent to them when the Committee resumed their sittings in April 1928.

Kumbh Mela. 1927.

This exceptionally large *mela* occurs once in 12 years at Hardwar and although there are melas every year and a large mela half way between each Kumbh Mela yet the number of pilgrims visiting Hardwar at any of these Melas does not approach the number visiting it for the Kumbh Mela. The total number of inward and outward passengers carried by rail was 356,473 and 335,728 respectively which necessitated the running of 143 inward and 206 outward special trains between March 12th and April 21st. Hardwar is situated on a Branch Line and both the Branch and the adjoining Main line are single track. The normal traffic to and from Hardwar can be quite easily carried on a single line and the expenditure which would be incurred in doubling the track merely for the Kumbh Mela traffic once in 12 years would not be justified. To ensure that there should be no hitch in the running of such a large number of trains on a single line section very careful preparations were made by the E. I. Railway beforehand, such as the installation of train control at Hardwar, the building of extra mela platforms and other facilities at Hardwar, the increase of facilities, such as extra crossing stations, on the sections Hardwar-Lhaksar and Lhaksar-Saharanpore. careful selection of staff and the issue of detailed instructions to all the staff concerned. The traffic was worked by means of the 'Flow' system under which trains run in one direction only for certain definite periods during the 24 hours. The 25 hours were divided into four periods o 7 to 11 hours, 11 to 15 hours, 15 to 2 hours, and 23 to 7 hours. Specials were despatched from Hardwar one after the other from 17 to 11 hours, again from 15 to 23 hours, while empty trains were worked in from 11 to 15 hours and from 23 to 7 hours.

All necessary steps were taken in conjunction with the Civil authorities to prevent overcrowding and to secure the convenience of passengers by the appointment of additional supervising and other staff, Medical and sanitary arrangements, drinking water, refreshment and waiting rooms and other measures. It is specially worthy of note that no goods wagons were used during the whole period for the carriage of passengers. The public press were Many of in praising the railway arrangements.unanimous the pilgrims thanked the Officials on the spot while important bodies like the Chief Khalsa

Diwan passed resolutions placing on record their appreciation of the facilities provided by the Railway.

Publicity.

The year 1927-28 marked a very considerable advance in the Publicity activities of the Indian railways. The Central Publicity Bureau of the Railway Board was inaugurated on 1st April 1927, a Chief Publicity Officer was appointed and provided with an Assistant and a small clerical staff. The office was located in Victoria Terminus, Bombay, it being felt that, to commence with, Bombay's position as the main port of arrival in India, closer touch could be kept with travellers and further more, Bombay presented certain distinct advantages from the point of view of printing facilities, etc.

The first three months were spent in organising and in working out schemes for the development of existing Publicity business and in formulating a programme for progress in new fields. Among some of the principal lines upon which it was decided to concentrate attention are :—

- Cinema film production and display ;
- Poster production and display ;
- Pamphlet production and display ;
- Publication of an *Indian State Railways Magazine* ;
- Demonstration Trains ;
- Upper and Lower class special excursion trains ;
- Press propaganda in India ;
- Press propaganda in Europe, America and other parts of the world ;
- Reciprocal publicity with the leading railways of the world.

The most important of these activities is undoubtedly the cinema film production and display as 80 per cent. of this is directed towards encouraging primary industries and the welfare of agriculturists and villagers. It must be remembered in this connection that owing to the very large proportion of illiterates in India, the cinema is the outstanding method of conveying information to the masses. Each State Railway is provided with a travelling cinema projection outfit which moves continuously from place to place over the different systems and by this means the propaganda films issued from the Central Publicity Bureau are widely circulated. That these displays, which are free, are fully appreciated is proved by the patronage accorded to them. For the six months ending December 1927 with a total of 396 displays, an attendance of 7½ lakhs of spectators was registered. Progressive census shows that this figure is steadily mounting. The work in this branch of the Publicity work has so increased that the appointment of a special Assistant became essentital, and has been created.

A large number of posters by leading artists has been prepared for display in India and in the principal countries of the world focussing attention on the attraction which India has to offer to travellers and toursits.

Following up these posters many attractive pamphlets have been written by first class journalists and are now available in the leading Information and Travel Bureaux in India, Europe, America and other countries.

The production of the *Indian State Railways Magazine* commenced in the month of October 1927, and from the outset proved extremely popular. This publication is intended to be partly a publicity medium and partly to encourage the railwaymen of India to take a wider outlook on railway and general affairs, it contains a variety of articles on travel, archaeology, shikar, transportation, welfare, fiction and natural history.

Upper and third class conducted tours and bazar specials have been run by several of the railways with considerable success and the extension of these is contemplated in the near future.

An intensive Advertising Campaign has been carried out in Great Britain and from the number of enquiries received regarding tours in India there can be no doubt that it has proved successful. This publicity was carried out jointly with the P. & O. Co., who report that there has been an increase of 300 per cent. in their cold weather short period passenger traffic to India.

Shortly after the inauguration of the Central Publicity Bureau, the need was felt for a representative in England for the purpose of giving information and advice to potential travellers at Home and to handle enquiries arising out of press propaganda. A Publicity Officer was appointed and temporary offices secured in London in which a State Railways Bureau was opened. There is no doubt that this departure has entirely justified itself and it has been decided that in 1929 a similar appointment will be created and an office opened in New York.

Capital Expenditure.—The outlay during the year 1926-27 was Rs. 34·41 crores, of which Rs. 32·44 crores represented expenditure incurred on State-owned lines.

Considerable progress has been made with the programme of new construction. Close on 700 miles of new railway were opened for traffic during 1927-28, and at the close of the year there were some 2,500 miles under construction.

Trade review.—The earnings of railways are dependent on the general prosperity of the country which in the case of India is most easily measured by the agricultural position and the returns of foreign trade.

Taken all round the year was a most profitable one for Railways, the gross earnings of State-owned lines reaching the record figure of 104 crores, or an increase of 5½ crores compared with 1926-27. Goods traffic was responsible for most of the increase in gross receipts, the earnings from goods carried on all railways amounting to 69¼ crores as compared with 65 crores in 1926-27. This large rise in goods traffic was considerably influenced by a marked increase in the cotton crop and in the export of raw jute. There were also considerable increases in the export of wheat, rice, oilseeds and tea The increase of one crore in passenger earningns is accounted for by an increase of over 18 million in the number of passengers carried, largely the effect of reduction of fares.

The tonnage of and earnings from the main commodities on Class I Railways during the last two years are shown in the table below :—

Commodity.	1926-27. No. of tons originating in millions.	1926-27. Rs. in crores.	1927-28. No. of tons originating in millions.	1927-28. Rs. in crores.	Increase + or Decrease— in Earnings (lakhs.)
(1) Fuel for public and Foreign Railways ..	18·95	9.65	20·38	10·17	+52
(2) Stores on Revenue account	16·13	2·39	14·84	3·37	+48
(3) Wheat	1·76	2·53	1·76	2·62	+9
(4) Rice in the husk and rice not in the husk..	4·11	3·85	4·40	4·11	+26
(5) Gram and Pulse, Jowar and Bajra and other grains	3·05	4·35	3·00	4·15	—20
(6) Marble and stone ..	2·99	0·88	3·33	1·02	+14
(7) Metallic ores	2·45	1·04	2·95	1·35	+31
(8) Salt	1·42	1·89	1·48	1·98	+9
(9) Wood, unwrought ..	1·32	0·89	1·32	0·89	..
(10) Sugar, refined and unrefined	0·77	1·88	0·79	1·81	—7
(11) Oilseeds	2·35	3·43	2·74	4·15	+72
(12) Cotton raw and manufactured	1·53	5·80	1·54	5·98	+18
(13) Jute, Raw	1·20	1·78	1·18	1·70	—8
(14) Fodder	0·80	0·60	0·75	0·60	..
(15) Fruits and vegetables, fresh	1·08	0·91	1·19	1·08	+17
(16) Iron and steel wrought.	1·02	1·97	1·20	2·28	+31
(17) Kerosine oil	0·92	2·04	1·06	2·26	+22
(18) Gur, Jagree, Molasses, &c.	0·78	1·19	0·75	1·15	—4
(19) Tobacco	0·26	0·66	0·28	0·69	+3
(20) Provisions	0·63	1·31	0·69	1·41	+10
(21) Military stores.. ..	0·38	0·37	0·38	0·42	+5
(22) Railway materials ..	3·30	1·20	9·91	1·51	+31
(23) Live stock	0·22	0·69	0·22	0·68	—1
(24) Other commodities ..	9·65	11·44	9·68	11·96	+52
	82·07	63·24	85·82	67·34	+4 10

Open Mileage.—The total route mileage on March 31st, 1928, was 39·711·58 made up of—

Broad-gauge..	19,584·68 miles
Metre-gauge.. ..	16,254·63 ,,
Narrow-gauge	3,872·27 ,,

Under the classification adopted for statistical purposes, this mileage is divided between the three classes of railways as follows :—

Class I	35,586·81
Class II	2,953·49
Class III	1,171·28

Class I includes all the 5′-6″ gauge mileage, 13,990 miles or 87 per cent. of the metre-gauge, and 2,012 or 54 per cent. of the narrow-gauges.

The State owned 28,426 miles or about 71 per cent. and directly managed 15,867 miles or about 40 per cent. of the total mileage open at the end of the year.

During the year 1927-28, 699 miles of new lines were opened for public traffic. Of this mileage, 504 miles belong to Class I, and 178 miles to Class II Railways.

Additions to Equipment.—During 1927-28 a considerable number of old carriages were replaced during the year by new carriages of larger seating capacity with the result that there was an increase in third class accommodation of 23,154 on the broad-gauge and 13,407 in the metre-gauge making a total increase of 41,561. There was a decrease in goods wagons of 1991 on the broad-gauge but an increase of 1551 on the metre-gauge.

The following table shows total figures of seating accommodation under the four classes:—

Class I Railways.	Number of seats in passenger carriages. 1st.	2nd.	Inter.	Third.
5′-6″ ..	22,908	41,639	58,710	627,324
3′-3⅜″ ..	10,207	13,785	9,877	339,042

340 covered wagons were added to the stock of class IR ys (B.G.)and 2,331 open wagons were reduced. On the Metre-gauge a total of 1,878 goods vehicles were added.

The Opening of the Khyber Railway.—The opening of the Khyber Railway on November 2, 1925, marks an interesting stage in the development of India's great railway system. Previously the railway stopped short at Jamrud a few miles from Peshawar on the Indian side of the Khyber Pass. This pass has been the main trade route to India from the north from the earliest days and most of the trade with far distant Central Asia still follows this route in picturesque caravans.

The question of extending the railway along the trade route was first considered in 1890 and since then three possible routes have been surveyed, namely, the Loi Shilman route, the Mullagarhi Shilman route and the Khyber Pass route.

As a result of a survey rapidly made in 1919 by Colonel G. R. Hearn, C.I.E., D.S.O., R.E., it was decided to build a railway through the Khyber Pass on a new alignment and after considering the merits of a line built to a two feet gauge, a metre-gauge with rack and a 5′-6″ gauge adhesion line it was finally decided that a 5′-6″ gauge line should be adopted.

The total length of the Khyber Railway is 27·74 miles from Jamrud to the Afghanistan frontier. Although this line is only a short one yet the work entailed has been very heavy. Starting at a height of about 1,500′ it rises to about 3,500′ at Landi Kotal and then descends to a height of about 2,400′ at Landi Khana.

The ruling grade for up trains to Landi Kotal is 1 in 33 compensated for curvature while that for down trains from Landi Khana is 1 in 25 also compensated.

The line passes through 32 tunnels with a total length of nearly 3 miles. There are in all ten stations excluding Jamrud and of these, three are reversing stations necessitated by the development of distance for reductions of gradient.

Financial Results of Working.—The total gross earnings of all railways in India during the year 1926-27 amounted to Rs. 112·36 crores as compared with 113·39 crores in 1925-26. These figures, however, include railways owned by Indian States and companies for which the Government of India has no direct financial responsibility. The figures of receipts and expenditure for railways with which the Government are directly concerned are as follows:—

		(Omitting 000), 1926-27.
		Rs.
Traffic receipts from Government Railways ..		99,44,69
Interest on Depreciation and Reserve Fund balances ..		20,96
Surplus profits from Subsidized Companies' railways ..		30,16
Total ..		99,95,81
	Rs.	
Working expenses including depreciation ..	60,95,02	
Surplus profits paid to Companies ..	1,42,28	
Interest on Government debt ..	22,67,37	
Land and subsidy to Companies ..	3,09	
Miscellaneous ..	13,10	
Total charges ..		5,80,76
Net gain ..		91,01,62
Contribution at 1 % on Capital at charge Surplus ..		8,94,19
Contribution of one-fifth of Surplus ..		1,78,83
Total contribution from Railway Revenues ..		7,59,59
Deduct loss on strategic lines ..		1,58,46
Net payment due from Railway to General Revenues in 1926-27. ..		6,01,13

After meeting all interest and annuity charges Government therefore received a net profit of 7·50 crores on the capital at charge of the State *minus* the net receipts, that is the gross receipts *minus* the working expenses, have in recent years given the following returns:—

	Per cent.
1913–14 ..	5·01
1922–23 ..	4·38
1923–24 ..	5·24
1924–25 ..	5·85
1925–26 ..	5·31
1926–27 ..	4·95
1927-28 ..	5.30

Up to date figures of the results of working of other countries are not available, but the following table compares the latest available figures of average receipts per ton mile of those countries which have published statistics of working later than 1919:—

	Receipts per ton mile. Pies.
United States of America 1925 ..	5·85
United Kingdom 1925 ..	15·17
Japan 1924-25 ..	7·22
Switzerland 1924 ..	21·91
	Receipts per ton mile Pies.
South Australia 1924-25 ..	17·01
Canadian Railways 1925 ..	5·30*
India 1926-27 ..	6·12

* Converted at $ 4·80=£ 1 and at Re. 1=1s. 6d.

In the case of receipts per passenger mile the figures for United States of America and India are as follows:—

United States of America 1925. 15·58 pies

India 1926-27 .. .. .. 3·44 „

while in England the present fare charged per mile third class is 18 pies.

From the above it will be seen that railway transportation of freight in India is probably the cheapest in the world and still more so for passenger traffic.

An examination of the latest available figures of operating ratios of foreign countries brings out results not unfavourable to Indian Railways.

	Year.	Operating Ratio
United States of America	1926	73·21 per cent.
France	1925	84·15 „ „
English Railways	1926	89·64 „ „
South African Railways	1925-26	77·58 „ „
Argentine Railways	1922	73·23 „ „
Canadian Railways	1926	78·79 „ „
India	1923-24	63·50 „ „
	1924-25	60·45 „ „
	1925-26	62·69 „ „
	1926-27	62·04 „ „
	1927-28	61·16 „ „

Value of Railway Materials Purchased.—The value of stores purchased by Indian Railways in 1927-28 shows a large increase from Rs. 28·03 crores to Rs. 35·87 crores. The principal increases were under Permanent Way (377 lakhs), Rolling Stock (244 lakhs, Electric plant (80 lakhs), Building and Station materials and Fencing (33 lakhs), Tools and Stores (25 lakhs) and Bridge work (15 lakhs). The value of indigenous material slightly fell from Rs. 15·49 crores to 15·16 crores in spite of an increase in permanent way of 21 lakhs, Tools and Stores of 8 lakhs, and Building and Station materials and Fencing of 8 lakhs. The fall was due to a decrease of 34 lakhs under the head ' Rolling Stock and 31 lakhs under other materials.

—	Value of imported materials.			Value of indigenous materials.	Total purchases 1927-28.	Total purchases 1926-27.
	Purchased direct.	Purchased through Agents in India.	Total imported materials.			
	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.
Rolling-Stock ..	5·76	0·98	6·74	0·49	7·23	4·79
Tools and stores	0·99	2·98	3·97	3·94	7·91	7·66
Permanent-way	4·42	0·37	4·79	5·61	10·40	6·63
Electric plant	1·45	0·91	2·36	0·02	2·38	1·58
Buildings and station materials and fencing	0·30	0·56	0·86	0·33	1·19	0·86
Bridge work	0·34	0·15	0·49	0·16	0·65	0·50
Workshop machinery ..	0·43	0·39	0·82	0·01	0·83	0·70
Engineer's plant	0·26	0·18	0·44	0·02	0·46	0·42
Other Materials*	..	0·24	0·24	4·58	4·82	4·89
Total ..	13·95	6·76	20·71	15·16	35·87	28·03

* Other materials consist of coal and coke, stone, bricks Indian lime and ballast, etc.

Kargali Colliery.—The East Indian and Bengal Nagpur Railway's Joint Bakaro Colliery started taking current during the year. The Joint Jarangdih Colliery is also taking current.

The working of this Colliery has been very satisfactory. The raising and despatching of coal from the shaft working was commenced in November and both electric winding Engines are in use. The colliery may now be said to be completely electrified.

Mohpani Colliery.—The Colliery was finally closed down during the year and the property made over to the Civil Authorities.

Bhurkunda Colliery.—Development work underground is proceeding satisfactorily. The Colliery commenced despatches to the North Western Railway from June 1927.

The Power House has been completed and by the end of the year it is hoped to have dispensed with all Steam Engines and Pumps. The output of railway owned collieries during 1927-28 was 3,161,545 tons out of a total of 70,50,336 tons consumed on class I Rys.

Number of Staff.—The total number of employees on Indian Railways at the end of the year 1927-28 was 800,102 as compared with 772,563 at the end of 1926-27. The increase in route mileage during the same period was 699 miles. The following table shows the number of employees by communities on 31st March 1927 and 1928 :—

	Europeans.	Statutory Indians.					Grand Total.
		Hindus.	Muham-madans.	Anglo-Indians.	Other Classes.	Total.	
1926-27	5,076	5,58,764	1,70,018	14,352	24,353	7,67,487	7,72,563
1927-28	5,110	5,73,901	1,79,262	14,374	27,455	7,94,992	8,00,102

Indianisation.—The various Railway Companies managing State and other Railway lines have followed the lead given by Government and accepted the recommendation of the Lee Commission that the extension of existing training facilities should be pressed forward as expeditiously as possible in order that recruitment in India may be advanced as soon as practicable up to 75 per cent. of the total number of vacancies in the Superior Services of the Railway concerned.

Schemes of recruitment.—The Secretary of State's approval to the schemes of recruitment and training of superior officers of the State Railways in the main branches of service—(1) Civil Engineering, (2) Transportation, (3) Commercial and (4) Mechanical Engineering—were received and the Regulations for the recruitment of these services issued under Railway Department Resolution No. 2508-E of 15th July 1926. The Regulations were revised in form and republished during 1927-28. Regulations for the recruitment and training in India of Officers for the Electrical Engineering and Signal Engineering Departments were incorporated in the Regulations for the Mechanical Engineering and Transportation (Power) Departments.

Six vacancies in the Indian Railway Service of Engineers and seven in the Transportation (Traffic) and Commercial Departments were filled during the year under these Regulations. The quota committees formed by Provincial Local Administrations nominated 88 candidates to appear for the two competitive examinations.

Towards the close of the year arrangements were afoot for the selection of the first batch of Special Class Apprentices for the Mechanical Engineering and Transportation (Power) Departments under the new Regulations.

The Board have under preparation a scheme for the recruitment and training in India of Officers for the State Railway Coal Department and also regulations for the recruitment in India of Medical Officers for State Managed Railways.

Public interest in the question has been maintained during the year, finding voice in the press and by interpellations in the Legislature. Considerable progress has been made with the scheme for the training of junior railway officers and of the senior subordinate staff on Indian railways. In this connection a Transportation School was opened at Chandausi on March 2nd, 1925.

The Railway Training School at Lyallpur for the North Western Railway has made progress since the last report. A temporary training school for the G.I.P. Railway has been established at Bina, pending the provision of a permanent school at Dhond and the scheme for forming a similar school at Gomoh for the E.I. and E.B. Railways is under consideration.

These schools provide courses of training for probationers before they are allowed to take up regular duties and for members of the staff to enable them to qualify for promotion to the upper grades ; and in addition to these courses, separate refresher courses are provided through which the entire subordinate staff are passed through at definite intervals.

College for training Railway Officers at Dehra Dun.—The provision of an institution to give practical training to junior officers on railways has been a long-felt need. The Railway Transportation School at Chandausi, which is meant for the training of subordinates only, could neither be suitably extended to provide a college for officers nor afford the facilities necessary for the purpose. The Railway Board have, therefore, decided to provide a college at Dehra Dun, which place is eminently suited for the purpose owing to its climate, situation and proximity to two other similar institutes, *viz.*, the Forest Research Institute and the Prince of Wales' Royal Indian Military College. The layout of the Railway College is under preparation and it is expected that work will soon be commenced. The scheme is estimated to cost about Rs. 20 lakhs.

Fatalities and Injuries.—During 1927-28 there was a decrease of 177 in the number of persons killed and an increase of 527, in the number of persons injured as compared with the figures of 1926-27. The number of passengers killed shows a decrease of 40 while the number of passengers injured shows a decrease of 86.

The following table shows the numbers killed and injured separately under passengers' railway servants and others for 1927-28 as compared with 1926-27 :—

—	Killed.		Injured.	
	1927-28.	1927-28.	1925-26.	1926-27.
A. Passengers—				
(1) Accidents to trains, rolling-stock, permanent-way, etc.	45	16	103	126
(2) Accidents caused by the movement of vehicles used exclusively on railways	339	324	1,046	1,117
(3) Accidents on Railway premises not due to Train accidents or to the movement of vehicles	3	7	29	21
B. Servants—				
(1) Accidents to trains, rolling stock, permanent-way, etc.	24	25	165	126
(2) Accidents caused by the movement of vehicles used exclusively on railways	323	319	1,323	1,253
(3) Accidents on Railway premises not due to Train accidents or to the movement of vehicles	54	46	2,713	2,204
C. Others—				
(1) Accidents to trains, rolling-stock, permanent-way, etc.	38	19	84	35
(2) Accidents caused by the movement of vehicles used exclusively on railways	2,203	2,107	732	793
(3) Accidents on Railway premises not due to Train accidents or to the movement of vehicles	41	30	68	61
Total ..	3,070	2,893	6,263	5,736

Of the total number of 3,070 persons killed 1,833 were trespassers on the line and 302 committed suicide. Thus 2,135 or over 70 per cent. of the persons killed on railway premises were for causes over which the railways have no control.

Local Advisory Committees.—108 meetings were held of the Local Advisory Committees on State-owned Railways during the year as compared with 92 in the previous year and 84 in 1925-26. Two new Committees were formed by the Bengal Nagpur Railway, at Ranchi for Bihar and Orissa and at Nagpur for the Central Provinces. A Resolution recommending that Local Advisory Committees should be reconstituted and their powers increased was debated on September 14th, 1927, in the Council of State, but after Government had agreed to communicate the discussion to Agents of Railways for such action as it might be found possible to take, the Resolution was withdrawn. The number of meetings held on the different railways during the year was as follows :—

Railway.		*No. of meetings.*
Assam Bengal		2
Bengal and North-Western.	Muzaffarpur ..	3
	Gorakphur ..	3
Bengal Nagpur ..	Calcutta ..	9
	Bihar & Orissa ..	3
	Central Provinces.	2
B.B. & C. I.		8
Burma		2
Eastern Bengal		10
East Indian ..	Calcutta ..	12
	Cawnpore ..	3
	Lucknow ..	3
G.I.P.	Bombay ..	12
	Nagpur	3
M. & S. M.		10
North Western ..	Lahore ..	12
	Karachi	4
Rohilkhund and Kumaon		3
South Indian		4
	Total..	108

Many different subjects were discussed at the meetings thus indicating the increasing importance attached by the public to the existence of the Committees. The following may be mentioned as typical of the subjects discussed :—

Overcrowding in trains.
Alterations in Time Tables.
Arrangements for the provision of refreshments and drinking water for passengers.
Remodelling of and improvements to stations.
Facilities for 3rd Class passengers.
Reduction in fares.
Concession in fares.
Rates for goods traffic.
Opening of new stations.

Electrification schemes.
Design of railway carriages.
Sanitary arrangements in lavatories of 3rd class carriages.
Settlement of claims.
Passengers travelling without tickets.
Construction of new lines.
Running of through trains and carriages.
Return tickets.
Arrangements in connection with fairs and during rush periods.
Late running of trains.
Intermediate class accommodation on certain trains.
Mileage coupon tickets.
Railway risk notes.
Waiting rooms for Intermediate class passengers.
Travelling cinema cars.
Provision of lavatories in servants' compartments.
Electric fans in intermediate compartments.
Checking of passenger's luggage in trains.
Cold storage transit for fish and refrigerator vans for perishables.
Road motor competitions.

THE CHIEF RAILWAYS IN INDIA.

The Assam-Bengal Railway, which is constructed on the metre gauge, starts from Chittagong and runs through Surma Valley across the North Cachar Hills into Assam. It is worked under a limited guarantee by a company.

Mileage open	.. ..	10·88
Capital at charge	..	Rs. 23,13,76,000.
Net earnings	..	Rs. 1,08,12,000.
Earnings per cent.	.. ..	4·67.

Bengal and North-Western.

The Bengal and North-Western Railway was constructed on the metre gauge system by a company without any Government assistance other than free land and was opened to traffic in 1885. The system was begun in 1874 as the Tirhut State Railway. In 1890 this line was leased by Government to the Bengal and North-Western Railway. Since then extensive additions have been made in both sections. It is connected with the Rajputana metre gauge system at Cawnpore and with the Eastern Bengal State Railway at Khatihar and the East Indian Railway at Benares and Mokameh Ghat.

Mileage open	.. ..	2,077.
Capital at charge	..	Rs. 20,44,35,000.
Net earnings	..	Rs. 2,33,76,000.
Earnings per cent.	.. ..	11·43.

Bengal-Nagpur.

The Bengal-Nagpur Railway was commenced as a metre gauge from Nagpur to Chhatisgarh in the Central Provinces in 1887. A company was formed under a guarantee which took over the line, converted it to the broad gauge and extended it to Howrah, Cuttack and Katni. In 1901 a part of the East Coast State Railway from Cuttack to Vizagapatam was transferred to it and in the same year sanction was given for an extension to the coal fields and for a connection with the Branch of the East Indian Railway at Hariharpur.

Mileage open	..	3,412.
Capital at charge	..	Rs. 70,51,03,000.
Net earnings	..	Rs. 3,56,60,000.
Earnings per cent.	..	5·06.

Bombay Baroda.

The Bombay, Baroda and Central India Railway is one of the original guaranteed railways. It was commenced from Surat via Baroda to Ahmedabad, but was subsequently extended to Bombay. The original contract was terminable in 1880, but the period was extended to 1905; and then renewed under revised conditions. In 1885 the Rajputana Malwa metre gauge system of State railways was leased to the Company and has since been incorporated in it. On the opening of the Nagda-Muttra, giving broad gauge connection through Eastern Rajputana with Delhi the working was entrusted to this Company. On the acquisition of the Company in April 1907 the purchase price was fixed at £11,685,581.

Mileage open	.. ..	3,831.
Capital at charge	..	Rs. 76,51,66,000.
Net earnings	..	Rs. 4,71,49,000.
Earnings per cent.	.. ..	6·16.

Burma Railways.

The Burma Railway is an isolated line, and although various routes have been surveyed there is little prospect of its being connected with the Railway system of India in the near future. In reply to a question in the Imperial Legislative Council in 1919, Sir Arthur Anderson said :—" During 1914-15 extensive survey operations were carried out to ascertain the best alignment for a railway connection along the coast route between Chitagong and certain stations on the Burma Railways south of Mandalay. A rival route via the Hukong Valley between the northern section of the Assam-Bengal Railway and the section of the Burma Railways north of Mandalay was to have been surveyed during the following year but was postponed because of the war. It is now proposed to commence this survey during the coming cold weather, and on its completion, Government will have sufficient information to enable them to decide which route shall be adopted. Thus no arrangements for the construction of a line have yet been made nor has any concession been granted, but it is probable that the line selected will be built at the cost of Government and worked by one or other of the main lines which it will connect. It was commenced as a State Railway and transferred in 1896 to a Company under a guarantee.

From Jan. 1st. 1929, its working will be taken over by the State.

Mileage open	.. ..	1,908.
Capital at charge	.. Rs.	31,35,12,000.
Net earnings	.. Rs.	2,18,07,000.
Earnings per cent.	.. ..	7·25.

Eastern Bengal.

The Eastern Bengal State Railway was promoted under the original form of guarantee and was constructed on the broad gauge. The first portion of the line running to Calcutta over the Ganges was opened in 1862. In 1874 sanction was granted for the construction on the metre gauge of the Northern Bengal State Railway, which ran from the north bank of the Ganges to the foot of the Himalayas on the way to Darjeeling. These two portions of the line were amalgamated in 1884 into one State Railway.

Mileage open	.. ..	1,740.
Capital at charge	.. Rs.	48,03,93,000.
Net earnings	.. Rs.	2,53,64,000.
Earnings per cent.	.. ..	5·28.

East Indian.

The East Indian Railway is one of the three railways sanctioned for construction as experimental lines under the old form of guarantee. The first section from Howrah to Pandua was opened in 1854 and at the time of the Mutiny ran as far as Raniganj. It gives the only direct access to the port of Calcutta from Northern India and is consequently fed by all the large railway systems connected with it. In 1880 the Government purchased the line, paying the shareholders by annuities, but leased it again to the company to work under a contract which was terminable in 1919.

The contract was not terminated until January 1st, 1925, when the State took over the management. From July 1st,1925, the Oudh & Rohilkhund railway was amalgamated with it.

Mileage open	.. ..	4,011.
Capital at charge	.. Rs.	1,41,70,42,000.
Net earnings	.. Rs.	8,68,35,000.
Earnings per cent.	.. ..	6·13.

Great Indian Peninsula.

The Great Indian Peninsula Railway is the earliest line undertaken in India. It was promoted by a Company under a guarantee of 5 per cent. and the first section from Bombay to Thana was open for traffic in 1853. Sanction was given for the extension of this line *via* Poona to Raichur, where it connects with the Madras Railway, and to Jubbulpore where it meets the East Indian Railway. The feature of the line is the passage of the Western Ghats, these sections being 15¾ miles on the Bhore Ghat and 9¼ miles on the Thul Ghat which rise 1,131 and 972 feet. In 1900, the contract with the Government terminated and under an arrangement with the Indian Midland Railway that line was amalgamated and leased to a Company to work.

The contract was terminated on June 30th, 1925, when the State took over the management.

Mileage open	.. ..	3,656.
Capital at charge	.. Rs.	1,17,46,16,000.
Net earnings	.. Rs.	5,62,15,000.
Earnings per cent.	.. ..	4·78.

Madras and Southern Mahratta Railway.

The Madras Railway was the third of the original railways constructed as experimental lines under the old form of guarantee. It was projected to run in a north-westerly direction in connection with the Great Indian Peninsula Railway and in a south-westerly direction to Calicut. On the expiry of the contract in 1907 the line was amalgamated with the Southern Mahratta Railway Company, a system on the metre gauge built to meet the famine conditions in the Southern Mahratta Country and released to a large Company called the Madras and Southern Mahratta Railway Company.

Mileage open	.. ..	30·65.
Capital at charge	.. Rs.	59,91,03,000.
Net earnings	.. Rs.	3,81,39,000.
Earnings per cent.	.. ..	6·39.

The North-Western.

The North-Western State Railway began its existence at the Sind-Punjab-Delhi Railway, which was promoted by a Company under the original form of guarantee and extended to Delhi, Multan and Lahore and from Karachi to Kotri. The interval between Kotri and Multan was unbridged and the railway traffic was exchanged by a ferry service. In 1871-72 sanction was given for the connection of this by the Indus Valley State Railways and at the same time the Punjab Northern State Railway from Lahore towards Peshawar was begun. In 1886 the Sind-Punjab-Delhi Railway was acquired by the State and amalgamated with these two railways under the name of the North-Western State Railway. It is the longest railway in India under one administration.

Mileage open	.. ..	65·14.
Capital at charge	.. Rs.	1,42,95,64,000.
Net earnings	.. Rs.	5,93,43,000.
Earnings per cent.	.. ..	4·01.

Oudh and Rohilkhand.

Oudh and Rohilkhand Railway was another of the lines constructed under the original form of guarantee. It began from the north bank of the Ganges running through Rohilkhand as far as Saharanpur where it joins the North-Western State Railway. It was not until 1887 that the bridge over the Ganges was completed and connected with the East Indian Railway. To effect a connection between the metre gauge systems to the North and those to the South of the Ganges; a third rail was laid between Bhuriwal and Cawnpore. The Company's contract expired in 1889 when the Railway was purchased by the State and has since been worked as a State Railway.

The working of this railway was amalgamated with that of the East Indian Railway from 1st July 1925.

The South Indian.

The South Indian Railway was one of the original guaranteed railways. It was begun by the Great Southern India Railway Company as a broad-gauge line ; but was converted after the seventies to the metre-gauge. This line has been extended and now serves the whole of the Southern India, south of the south-west line of the Madras Railway. Between Tuticorin and Ceylon a ferry service was formerly maintained, but a new and more direct route to Ceylon *via* Rameshwaram was opened at the beginning of 1914. As the original contract ended in 1907, a new contract was entered upon with the Company on the 1st of January 1908.

Mileage open ..	..	2,068
Capital at charge ..	Rs.	36,56,52,000
Net earnings ..	Rs.	2,48,40,000
Earnings per cent. ..	..	6·79

The Indian States.

The principal Indian State Railways are the Nizam's, constructed by a company under a guarantee from the Hyderabad State; the Kathiawar system of railways, constructed by subscriptions, among the several Chiefs in Kathiawar; the Jodhpur and Bikaner Railways, constructed by the Jodhpur and Bikaner Chiefs; the system of railways in the Punjab, constructed by the Patiala, Jind, Maler Kotla, and Kashmir Chiefs; and the railways in Mysore, constructed by the Mysore State.

PROGRAMME OF FUTURE CONSTRUCTION.

At the end of the financial year 1927-28 a total of 3,629 miles of new lines was under construction, distributed as follows :—

	Miles.
5-'6" gauge	1,429.81
3'-3⅜" gauge	1,820.61
2'-6" gauge	378.34

During 1927-28 sanction was accorded to the construction of new lines totalling 16·6 miles.

	Miles.
5'-6" gauge	697.46
3'-3⅜" gauge	760.11
2'-6" gauge	158.81

Khyber Railway.

The construction of the Khyber Railway, a length of about 28 miles, was sanctioned in July 1920 and in November of that year, after various preliminary difficulties had been overcome, the work of construction, actually commenced. Owing to the peculiar and arduous conditions under which the construction had to be carried out, five years elapsed before the section from Jamrud to Landikotal, a length of about 21 miles, was completed and opened for public traffic on 2nd November 1925. The remaining portion from Landikotal to Landikhana was opened in April 1926.

This is the first 5 feet 6 inches gauge line which has been built to the new Standard Dimensions and allows for a maximum running width of 12 feet and running height of 15 feet 6 inches. The great engineering difficulties which have had to be overcome, and the standard to which the railway has been built render it a technical achievement ranking with the greatest engineering works carried out by Railway Engineers.

The line is situated entirely outside the administrative border of British India in the strip of tribal territory which separates it from Afghanistan. The trade that passes through the Khyber Pass is already considerable and it is hoped that the railway will still further increease its volume, thereby bringing profit and employment to many who in the past have subsisted with difficulty on the meagre agricultural resources of the country which it traverses.

Lines under Construction.

Of the total of 3,629 miles of lines of various gauges under construction at the end of the year, a brief account of some of the more important is given below.

Raipur-Vizianagram Railway.

This trunk line on the 5'-6" guage, 261 miles in length, passes through a large undeveloped area, and will provide direct communication between the Central Provinces and the new Harbour now under construction at Vizgapatam on the east coast. The section of the line from Vizianagram to Parvatipuram, 48 miles long, was completed and opened to traffic in 1924.

During 1926-27 some realigning work has been carried out which will appreciably reduce the length of the line. Work at the northern and southern ends is progressing well but on the middle portion sickness and delay in obtaining possession of land have impeded progress. The line will be opened by sections as they are ready, but it is not expected that the whole line will be opened throughout till 1931.

Vizagapatam Harbour.

The suction dredger, 'Vizagapatam' which met with a serious accident in May 1927, returned from Calcutta, after undergoing necessary repairs, about the end of December. Throughout the year reclamation work was vigorously pushed on, and bunds were constructed around the railway and the manganese wharf area on the north side of the dock reclamation area and the storage canal. Good progress was made with the sinking of the monliths of the wharf wall, though work was at first somewhat hampered owing to the late delivery of the two loco cranes which had been ordered from England. The provision of an additional wharf for dealing exclusively with the manganese ore traffic, and of a dry dock, was sanctioned during the year, and a start was made with their construction. Work on the construction of staff quarters is well in hand. The general lay out of the railway connections was approved by the Railway Board and the preparation of the estimates was taken in hand. Certain anti-malarial measures were also carried out in accordance with the advice of the Director of the Central Malaria Organisation with the Government of India.

Lucknow-Sultanpur Jaunpur (E. I. Railway).

The question of constructing a railway between Jaunpur and Lucknow *via* Sultanpur has been long under consideration. The object of the scheme is to open out the country along the Goomti river between the Oudh and Rohilkhand main and loop lines. The railway will run more or less along the watershed between the Goomti and Sai Rivers and will cross a well cultivated fertile tract of country. The construction of the line which is about 142 miles long on the 5′ 6″ guage was sanctioned in August 1927 and will take about 2½ years to complete.

Unao-Madhoganj (E. I. Railway.)

The construction of a line between Unao and Madhoganj a distance of 48 miles on the 5′-6″ gauge was sanctioned in August 1927. The principal object of this line is to open up the tract of country bounded on the west by the Ganges, on the east by the East Indian Railway main line Bareilly to Lucknow and on the south by the Lucknow-Cawnpore Branch. The line may eventually form part of a larger scheme for a through line between Unao and Chandausi *via* Jalalabad and Budaon; but as it was financially sound on its own merits and would not conflict with further developments it was decided to proceed with it independently especially in view of the fact that the area which the line would traverse, would be watered by the Sarda Canal under construction. It is hoped to have the line open for public traffic by the end of 1929.

Kartal-Kamasin (G. I. P. Railway).

The construction of this broad guage branch on the Great Indian Peninsula Railway, 59 miles long, was sanctioned in February 1928. It is intended to serve a fertile and well irrigated area in the Banda District of the United Provinces, and will open out the Ken Baghain Doab commanded by the Ken Canal. The land acquisition proceedings are in hand. The construction of the line is expected to take about three years a possibility of an extension of the branch to Lalitpur is being investigated.

Vasad-Borsad-Katana (B. B. & C. I. Railway).

The construction of this line, about 26 miles long on the Bombay, Baroda and Central India Railway broad gauge was sanctoned in December 1927. It will traverse a rich agricultural tract of the Borsad Taluka and will greatly stimulate trade and development therein. Arrangements are at present in hand to obtain possession of the land required for the line, and it is hoped to open it in 1930.

Chak Jhumra Khushab Railway.

The construction of this broad guage chord line by the N. W. Railway was sanctioned in two parts, (*i*) from Chak Jhumra to Chiniot in November 1926 and (*ii*) the remainder in April 1927. It will provide across connection between the Lyallpur District and Shahpur which is badly required and will also provide a shorter alternative route to Waziristan to the relief of the main line north of Lahore. About 80 miles of new line are involved and two large bridges over the Chenab and Jhelum rivers. It is hoped to open this line in 1929.

Lyallpur-Chananwala (N. W. Ry.)

The construction of the Lyallpur-Chananwala Railway, on the 5′-6″ gauge, was sanctioned in February 1928, and with the Chak Jhumra-Khushab line will provide a cross connection from Kundian to Chananwala which will probably be extended to Bhatinda. The line, which is about 110 miles in length, will connect up the important towns of Sargodha, Chiniot, Lyallpur, Samundri, Tandlianwala, Okara, Dipalpur and Fazilka, and will probably be open for traffic about the middle of 1930.

Batala-Butari (N. W. Railway).

The construction of this railway, about 42 miles in length, was sanctioned in January 1928. It will form a loop connecting Batala on the Amritsar-Pathankot branch with Butari on the Amritsar-Jullundur section of the main line of the North Western Railway.

Besides touching three important places of pilgrimage it will traverse one of the most fertile tracts in the Punjab. It is anticipated that the line will be opened for traffic in about a year's time.

Kangra Valley Railway.

This line is a 2′-6″ gauge extension from the N. W. Ry. broad gauge terminal at Pathankote and traverses the wide and fertile tract known as the Kangra Valley. The line will shorten the journey to the important hill station of Dalhousie and Dharamsala.

The Punjab Government which has in hand the construction of the Uhi-Hydro-Electric scheme, had agreed to guarantee this line against loss in working over a number of years, as a rail connection of some kind is necessary for the transport of machniery and stores required for the Hydro Electric Scheme and for maintenance of the transmission lines after opening.

Abdulpur-Nawabganj (E. B. Railway.)

The construction of this broad gauge line about 57 miles long was sanctioned in October 1927. From the railway point of view the line is very important as it will permit of traffic being diverted from the Godagari ferry to *via* the Sara bridge with a considerable reduction in working expenses. The line will serve Rampur Boaliar or Rajshahi, a district town of considerable local importance. It is expected that the section from Abdulpur to Rampur Boalia 28 miles will be open for traffic early in 1929.

Salem-Vriddhachalam (S. I. Railway.)

This railway is the outcome of several proposals, some dating as far back as 1909, for lines to serve the Salem and South Arcot district. The line which is to be on the metreguage, will be about 83 miles long and together with the Vriddhachalam-Cuddalore Railway now under construction, will form a cross feeder connecting Salem Junction on the broad-gauge with Cuddalore on the metre-gauge. It will also pass through fairly populous country and busy trade centres and will afford facilities for the general development of trade besides developing the well irrigated country to be traversed.

Trichinopoly-Manamadura (S. I. Railway).

The construction of this line 94 miles in length and on the metre-gauge, was sanctioned in the year 1927-28. It is one of the lines recommended by Mr. Izat, who was deputed in the year 1921, to investigate the railway requirements of Southern India. The line will traverse a thickly populated country and serve several important towns including Siviganaga in the vicinity of which there are several renowned temples largely attended by pilgrims. It will also afford the relief to the Trichinopoly-Manamadura Section of the South Indian Railway main line which will be needed when the Villupuram-Trichinopoly line is open.

Taungdwingyi-Kyankpadaung (Burma Railways.)

The first section from Taungdwingyi to Natmauk has already been opened for traffic Steady progress has been maintained on the Natmauk-Pinchaung and Pinchaung-Kyankpadaung Sections. The work on major bridges was hampered by heavy floods. It is expected that the whole line will be opened throughout in March 1930.

Minbu-Pakokku (Burma Railways.)

The construction of this important metre-gauge line, about 312 miles in length, as part of the Burma Railways system, was sanctioned in December 1927. It involves a wagon ferry over the Irrawaddy river connecting Patanago and Malun. The line is designed to open out a large area at present lacking in means of transportation.

Electrification of the Madras Suburban Section. South Indian Railways.

A scheme for the electrification of the suburban lines of the South Indian Railway from Madras Beach to Tambaram was sanctioned during the year 1927-1928 at an estimated cost of Rs. 42 lakhs approximately. It is anticipated that the introduction of electric traction on this section will not only enable the railway administration to cope with the normal increase in traffic, but will also considerably encourage the development of suburban passenger traffic in the area.

Madras Hydro-Electric Schemes.

Similarly further investigations had also to be made of the Madras Hydro-Electric projects and of the schemes for the electrification of the Madura-Trichinopoly and certain other section of the South Indian Railway for which it is intended to obtain power from hydro-electric sources. The results of these further investigations are still awaited.

Electrification of Suburban Lines near Calcutta.

With regard to the Calcutta suburban electrification schemes, it was found necessary in view of the heavy expenditure involved to carry out further investigation s both as to the probable development of traffic in the suburban area and the estimated cost of the project, in order to ascertain to what extent the introduction of electric traction on the section would be justified financially.

Terminal Facilities for Passenger Traffic of the Bombay, Baroda and Central India Railway at Bombay.

The Railway Board with the approval of the Secretary of State for India have sanctioned the construction of the Bombay, Baroda and Central India Railway terminal station at Bellasis Road, Bombay, for dealing with the long distance passenger traffic at an estimated cost of Rs. 1,52,90,000. The work is in progress. When completed this station will take the place of Colaba station which will be closed a n d dismantled.

Calcutta Chord Railway.

This line starts from a point near Dankheri station on the Burdwan-Howrah Chord of the East Indian Railway and joins the Eastern Bengal Railway near Dum Dum Junction.

It is about 8 miles in length and includes a bridge over the Hooghly river at Bally. This connection is primarily intended for export of coal from the East Indian Railway. But it is likely in the near future to be used also for coal from the Bengal Nagpur Railway Coalfields, and with the developments anticipated in the terminal arrangements at Calcutta and the electrification of the lower portion of the Eastern Bengal Railway a large proportion of the Suburban passenger traffic will eventually pass over it.

INDIA AND CEYLON.

The possibility of connecting India and Ceylon by a railway across the bank of sand extending the whole way from Rameswaram to Mannar has been reported on from time to time, since 1895 various schemes having been suggested.

The South Indian Railway having been extended to Dhanushkodi, the southernmost point of Rameswaram Island, and the Ceylon Government Railway to Talaimannar, on Mannar Island, two points distant from each other about 21 miles across a narrow and shallow strait, the project has again been investigated with the idea of connecting these two terminal stations by a railway constructed on a solid embankment raised on the sand bank known as "Adam's Bridge," to supersede the ferry steamer service which has been established between these two points.

In 1913, a detailed survey was made by the South Indian Railway Company, and a project has now been prepared. This project contemplates the construction of a causeway from Dhanushkodi Point on the Indian side to Talai mannar Point on the Ceylon side, a length of 20·05 miles of which 7·19 will be upon the dry land of the various lands, and 12·86 will be in water. The sections on dry land will consist of low banks of sand pitched with coral and present no difficulty. The section through the sea will be carried on a causeway which it is proposed to construct in the following way. A double row of reinforced concrete piles, pitched at 10 feet centres and having their inner faces 14 feet apart, will first be driven into the sand. These piles will then be braced together longitudinally with light concrete arches and chains and transversely with concrete ties, struts and chains. Behind the piles slabs of reinforced concrete will be slipped into position, the bottom slabs being sunk well into the sand of the sea bottom. Lastly, the space enclosed by the slabs will be filled in with sand.

The top of the concrete work will be carried to six feet above high water level, and the rails will be laid at that level. The sinking of the piles and slabs will be done by means of water jets. This causeway, it is expected, will cause the suspended sand brought up by the currents, to settle on either side bringing about rapid accretion and eventually making one big island of Rameswaram island and Mannar island.

Indo-Burma Connection.

The raids of the Emden in the Bay of Bengal in 1914, and the temporary interruption of communications between India and Burma, stimulated the demand for a direct railway connection between India and Burma. Government accepted the position and appointed Mr. Richards, M. Inst. C.E., to be the engineer-in-charge of the surveys to determine the best route for a railway from India to Burma. The coast route appears to be the best one but at present would not be remunerative. This would start from Chittagong, which is the terminus and head-quarters of the Assam-Bengal Railway and a seaport for the produce of Assam. The route runs southwards through the Chittagong district, a land of fertile rice fields intersected by big rivers and tidal creeks and it crosses the Indo-Burma frontier, 94 miles from the town of Chittagong. For about 160 miles further it chiefly runs through the fertile rice lands of Arrakan and crosses all the big tidal rivers of the Akyab delta. These include the Kalidan river which drains 4,700 miles of country and even at a distance of about 30 miles from its mouth is more than hals a mile wide. About 260 miles from Chittagong the railway would run into the region of mangrove swamps which fringe the seacoast north and south of the harbour of Kaukkphu stretching out into the mangrove swamps like ribs from the backbone. Innumerable spurs of the Arrakan Yoma have to be crossed. Yoma is a mountain ridge which extends from Cape Negrais northwards until it loses itself in a mass of tangled hills east of Akyab and Chittagong. At its southern end the height of the ridge is insignificant but it has peaks as high as 4,000 feet before it reaches the altitude of Sandway and further north it rises much higher. It is a formidable obstacle to railway communication between India and Burma. This route is estimated to cost about £7,000,000 and would have to be supplemented by branch lines to Akyab where there is at present a considerable rice traffic and the cost of this would have to be added to the £7,000,000 already referred to.

The other routes examined have been the Hukong Valley route and the Manipur route which were surveyed by the late Mr. R. A. Way many years ago. The Manipur route was estimated to cost about £5,000,000 as it has to cross three main ranges of hills with summit levels of 2,650, 3,600 and 8,900 feet long. Altogether there would be about four miles of tunnelling through the three main ridges and through other hills and more than 100 miles of expensive undulating railway with grades as steep as 1 in 50 and 11,000 feet of aggregate rise and fall. The Hukong valley route is only about 284 miles long and it presents fewer engineering difficulties than either the Coast or the Manipur route. One hundred and fifty miles of this route lie in open country capable of cultivation though at present it is only very thinly populated. Only one range of hills has to be crossed and this can be negotiated with a summit tunnel of 5,000 feet long at a height of 2,500 feet. There are less than fifty miles of very heavy work and only about 4,500 ft. aggregate of rise and fall. The Hukong Valley route although cheaper than the Manipur route is not a practical financial proposition and both may be ruled out of consideration.

Main results of working of all Indian Railways treated as one system.

—	Particulars.		1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
1	Mileage open at close of the year	Miles	37,029	37,266	37,618	38,039	38,270	38,579	39,049	39,712
2	Total Capital outlay, including ferries and suspense, on open lines (in thousands of rupees)	.. Rs.	6,26,80,53	6,47,97,17	*6,97,46,07	*7,17,93,02	7,33,37,38	7,54,31,52	7,88,66,66	8,22,86,25
3	Gross earnings (in thousands of rupees)	.. "	91,98,76	92,88,67	1,05,65,19	1,07,79,66	1,14,75,20	1,13,39,21	1,12,35,66	1,18,22,17
4	Gross earnings per mile open †	.. "	24,842	24,925	27,986	28,350	29,785	29,355	28,540	29,624
5	Gross earnings per mile open per week †	.. "	478	479	538	545	573	565	549	569
6	Gross earnings per train-mile	.. "	5·69	5·80	6·69	6·78	7·01	6·99	6·58	6·58
7	Total working expenses (in thousands of rupees)	.. "	60,29,04	70,79,95	72,99,49	68,44,77	69,36,68	71,09,05	69,70,08	72,30,76
8	Working expenses per mile open † ..	.. "	16,274	18,998	19,344	17,992	17,992	18,408	17,680	18,090
9	Working expenses per train-mile ..	.. "	3·73	4·42	4·62	4·31	4·24	4·38	4·08	4·02
10	Percentage of working expenses to gross earnings	.. Per cent.	65·54	76·22	69·09	63·50	60·45	62·69	62·04	61·16
11	Net earnings (in thousands of rupees)	.. Rs.	31,69,72	22,08,72	32,65,70	39,34,89	45,38,52	42,30,16	42,65,58	45,92,41
12	Net earnings per mile open †	.. "	8,556	5,927	8,651	10,348	11,780	10,951	10,835	11,505
13	Net earnings per train-mile	.. "	1·96	1·38	2·07	2·48	2·77	2·61	2·50	2·56
14	Percentage of net earnings on total capital outlay (item 2) ..	.. Per cent.	5·06	3·41	4·68	5·48	6·19	5·61	5·41	5·58
15	Passenger train-miles (in thousands).	Train-miles.	58,016	60,617	63,991	64,484	65,964	69,541	74,967	79,602

* Represent figures of capital at charge. † Represent figures per mean mile worked from 1921–22 onwards.

Main results of working of all Indian Railways treated as one system—*contd.*

	Particulars.		1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
16	Goods train-miles (in thousands)	Train-Miles	67,010	63,180	58,319	57,538	59,965	57,411	57,328	59,874
17	Mixed train-miles (in thousands)..	"	32,254	30,402	30,342	30,221	29,661	30,836	29,717	30,684
18	Total, including miscellaneous train-miles (in thousands) ..	"	161,802	160,155	158,041	158,949	163,619	162,258	170,720	179,661
19	Unit-mileage of passengers (in thousands)	Unit-miles	20,985,008	19,794,595	18,923,705	19,465,879	19,910,350	20,331,752	20,366,250	21,704,290
20	Freight ton-mileage of goods (in thousands)	Ton-miles	19,920,888	17,736,009	18,373,696	18,827,873	21,268,691	19,900,018	20,374,679	21,902,222
21	Average miles a ton of goods was carried	.. Miles	227·56	205·57	196·8	* 258·6	* 273·4	249·2	237·4	2·44
22	Average rate charged for carrying a ton of goods one mile ..	Pies	4·62	5·36	6·05	6·15	6·00	6·22	6·12	6·02
	Average miles a passenger was carried.									
23	1st class	.. Miles	130·55	120·98	125·5	† 89·8	† 97·5	107·7	117·1	131·4
24	2nd class	.. "	77·81	74·03	67·4	† 35·4	† 38·0	38·6	42·0	48·1
25	Intermediate class..	.. "	71·66	72·08	62·5	† 46·6	† 47·0	45·8	45·4	43·9
26	3rd class	.. "	38·73	36·58	35·2	† 33·9	† 34·1	33·4	33·7	34·2
27	Total	.. "	37·52	35·26	33·5	† 34·3	† 34·5	33·9	33·1	34·8
	Average rate charged per passenger per mile.									
28	1st class	.. Pies	16·72	20·25	23·74	† 23·4	† 22·0	20·8	19·1	17·0
29	2nd class	.. "	7·84	9·13	11·75	† 10·5	† 9·92	9·51	8·60	7·84
30	Intermediate class..	.. "	4·36	4·45	5·33	† 5·12	† 4·95	4·92	4·58	4·27
31	3rd class	.. "	2·92	3·04	3·52	† 3·46	† 3·47	3·47	3·35	3·25
32	Total	.. "	3·18	3·33	3·78	† 3·75	† 3·74	3·73	3·59	3·47

* Based on tons originating. † Based on passengers originating, Season and vendors' tickets are included under separate classes.

Mileage of Railway Lines in India open for Traffic at end of year.

Railways.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
STATE LINES.									
Aden	29	29	29	29	29	29	29	29	29
Alnavar Dandeli (Provincial)*	19	19	19	19	19	19	19	19	19
Y. E. U.*	..	..	..	14	27	27	27	49	49
m-Bengal*	869	869	869	874	874	874	874	874	913
ar*	210†	210	210	210	210	210	210	210	210
	1,889	1,891	1,902	1,922	1,998	2,013	2,059	2,201	2,201
ension*	21	21	21	21	21	21	21	21	21
roda & Central India*	2,819	2,819	2,819	2,852	2,863	2,893	2,899	2,890	2,882
ambusar*	30	30	30	30	30	30	30	30	30
	1,536	1,536	1,536	1,530	1,530	1,530	1,537	1,590	1,592
rhwal (a)	80	80	80	80	80	80	83	83	83
han Tank Decanville	..	..	..	..	..	..	42	42	42
rnool*	32	32	32	32	32	32	32	32	32
	2,469	2,459	2,462	2,479	2,481	2,485	3,751	3,795	3,817
	1,633	1,622	1,630	1,622	1,622	1,616	1,604	1,611	1,637
	217	217	217	217	217	627	627	627	625
Great Indian Peninsula	2,562	2,562	2,562	2,605	2,616	2,672	(b) 3194	3,194	3,194
Jodhpur-Hyderabad* (British Section)	124	124	124	124	124	124	124	124	124
Jorhat Provincial State	32	32	32	3	32	32	32	32	32
Kalka-Simla	60	60	60	62	60	60	60	60	60
Zhob Valley	..	..	..	40	46	46	46	46	85

* Worked by a Company.

† Formerly worked as part of the Mysore Section of M. & S. M. Railway.

(a) Includes 16·79 miles of mixed (5′-6″ and 3′-3⅜″) gauge line between Burhwal and Barabanki and also 2·18 miles of the O. & R. Railway metre-gauge line at Benares.

(b) Includes Agra-Delhi Chord, Baran-Kotah, Bhopal-Itarsi (a part of this line is owned by the Bhopal Durbar) and Cawnpore-Banda Railway.

Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
STATE LINES—*contd.*									
Kohat-Thal	62	62	62	62	62	62	62	62	62
Kolar Gold-fields*	..	..	..	..	10	10	10	10	10
Lucknow-Bareilly*	312	316	316	316	316	313	312	312	312
Madras and Southern Mahratta	2,550	2,566	2,559	2,559	2,560	2,560	2,560	2,560	2,584
Morappur-Hosur*	73	73	73	73	73	73	73	73	73
Moulmein-ye*	..	..	..	..	27	70	89	89	89
Nilgiri*	29	29	29	29	29	29	29	29	29
North-Western	3,785	3,984	4,084	4,076	4,075	4,075	4,101	4,432	4,535
Palanpur-Deesa*	17	17	17	17	17	17	17	17	17
Purulia-Ranchi*	115	115	115	115	115	115	115	117	117
Pyinmana-Taungdwingyi*	..	..	..	10	10	67	67	67	92
Raipur-Dhamtari*	57	57	57	57	57	57	57	57	57
South Indian*	1,327	1,327	1,327	1,318	1,317	1,317	1,317	1,353	1,508
Southern Shan States*	70	87	87	87	87	87	86	86	86
Travancore British section	50	50	50	50	50	50	50	50	50
Tirhoot*	815	815	814	812	813	815	808	809	807
Tirupattur-Krishnagiri*	25	25	25	25	25	25	25	25	25
Trans Indus (Kalabagh-Bannu)	135	135	162	162	162	102	162	162	162
Tumsar-Tirodi Light*	46	46	46	46	47	47	47	47	47
ASSISTED COMPANIES.									
Ahmedabad-Parantij	89	89	89	89	89	89	89	89	89
Ahmadpur-Katwa	32	32	32	32	32	32	32	32	32

* Worked by a Company.

Mileage of Railway Lines in India open for Traffic at end of year.

Railways.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
STATE LINES.									
Aden	29	29	29	29	29	29	29	29	29
Alnavar Dandeli (Provincial)*	19	19	19	19	19	19	19	19	19
Alon-Y. E. U.*	..	..	..	14	27	27	27	49	49
Assam-Bengal*	869	869	869	874	874	874	874	874	913
Bangalore-Harihar *	210†	210	210	210	210	210	210	210	210
Bengal-Nagpur*	1,889	1,891	1,902	1,922	1,998	2,013	2,059	2,201	2,201
Bezwada Extension*	21	21	21	21	21	21	21	21	21
Bombay, Baroda & Central India* ..	2,819	2,819	2,819	2,852	2,863	2,893	2,899	2,890	2,882
Broach-Jambusar *	30	30	30	30	30	30	30	30	30
Burma*	1,536	1,536	1,586	1,530	1,530	1,530	1,537	1,590	1,592
Cawnpore-Burhwal (*a*)	80	80	80	80	80	80	83	83	83
Dera Ismail Khan Tank Decanville ..	..	..	..	..	..	..	42	42	42
Dhone-Kurnool*	32	32	32	32	32	32	32	32	32
East Indian	2,469	2,459	2,462	2,479	2,481	2,485	3,751	3,795	3,817
Eastern Bengal	1,633	1,622	1,630	1,622	1,622	1,616	1,604	1,611	1,637
Satpura	217	217	217	217	217	627	627	627	625
Great Indian Peninsula	2,562	2,562	2,562	2,605	2,616	2,672	(*b*) 3194	3,194	3,194
Jodhpur-Hyderabad*(British Section) ..	124	124	124	124	124	124	124	124	124
Jorhat Provincial State	32	32	32	3	32	32	32	32	32
Kalka-Simla	60	60	60	62	60	60	60	60	60
Zhob Valley	..	..	..	40	46	46	46	46	85

* Worked by a Company. † Formerly worked as part of the Mysore Section of M. & S. M. Railway.

(*a*) Includes 16·79 miles of mixed (5′-6″ and 3′-3⅜″) gauge line between Burhwal and Barabanki and also 2·18 miles of the O. & R. Railway metre-gauge line at Benares.

(*b*) Includes Agra-Delhi Chord, Baran-Kotah, Bhopal-Itarsi (a part of this line is owned by the Bhopal Durbar) and Cawnpore-Banda Railway.

Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
STATE LINES—*contd.*									
Kohat-Thal	62	62	62	62	62	62	62	62	62
Kolar Gold-fields*	..	..	..	..	10	10	10	10	10
Lucknow-Bareilly*	312	316	316	316	316	313	312	312	312
Madras and Southern Mahratta	2,550	2,566	2,559	2,559	2,560	2,560	2,560	2,560	2,584
Morappur-Hosur *	73	73	73	73	73	73	73	73	73
Moulmein-ye *	..	..	..	..	27	70	89	89	89
Nilgiri*	29	29	29	29	29	29	29	29	29
North-Western	3,785	3,984	4,084	4,076	4,075	4,075	4,101	4,432	4,535
Palanpur-Deesa*	17	17	17	17	17	17	17	17	17
Purulia-Ranchi*	115	115	115	115	115	115	115	117	117
Pyinmana-Taungdwingyi*	..	..	..	10	10	67	67	67	92
Raipur-Dhamtari *	57	57	57	57	57	57	57	57	57
South Indian*	1,327	1,327	1,327	1,318	1,317	1,317	1,317	1,353	1,508
Southern Shan States*	70	87	87	87	87	87	86	86	86
Travancore British section	50	50	50	50	50	50	50	50	50
Tirhoot*	815	815	814	812	813	815	808	809	807
Tirupattur-Krishnagiri*	25	25	25	25	25	25	25	25	25
Trans Indus (Kalabagh-Bannu)	135	135	162	162	162	102	162	162	162
Tumsar-Tirodi Light *	46	46	46	46	47	47	47	47	47
ASSISTED COMPANIES.									
Ahmedabad-Parantij	89	89	89	89	89	89	89	89	89
Ahmadpur-Katwa	32	32	32	32	32	32	32	32	32

* Worked by a Company.

Mileage of Railway Lines in India open for Traffic at end of year.

Railways.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
STATE LINES.									
Aden	29	29	29	29	29	29	29	29	29
Alnavar Dandeli (Provincial)*	19	19	19	19	19	19	19	19	19
Alon-Y. E. U.*	..	..	..	14	27	27	27	49	49
Assam-Bengal*	869	869	869	874	874	874	874	874	913
Bangalore-Harihar *	210†	210	210	210	210	210	210	210	210
Bengal-Nagpur*	1,889	1,891	1,902	1,922	1,998	2,013	2,059	2,201	2,201
Bezwada Extension*	21	21	21	21	21	21	21	21	21
Bombay, Baroda & Central India* ..	2,819	2,819	2,819	2,852	2,863	2,893	2,899	2,890	2,882
Broach-Jambusar *	30	30	30	30	30	30	30	30	30
Burma*	1,536	1,536	1,536	1,530	1,530	1,530	1,537	1,590	1,592
Cawnpore-Burhwal (a)	80	80	80	80	80	80	83	83	83
Dera Ismail Khan Tank Decanville ..	..	..	..	..	..	..	42	42	42
Dhone-Kurnool*	32	32	32	32	32	32	32	32	32
East Indian	2,469	2,459	2,462	2,479	2,481	2,485	3,751	3,795	3,817
Eastern Bengal	1,633	1,622	1,630	1,622	1,622	1,616	1,604	1,611	1,637
Satpura	217	217	217	217	217	627	627	627	625
Great Indian Peninsula	2,562	2,562	2,562	2,605	2,616	2,672	(b) 3194	3,194	3,194
Jodhpur-Hyderabad*(British Section) ..	124	124	124	124	124	124	124	124	124
Jorhat Provincial State	32	32	32	3	32	32	32	32	32
Kalka-Simla	60	60	60	62	60	60	60	60	60
Zhob Valley	..	..	..	40	46	46	46	46	85

* Worked by a Company. † Formerly worked as part of the Mysore Section of M. & S. M. Railway.

(a) Includes 16·79 miles of mixed (5′-6″ and 3′-3⅜″) gauge line between Burhwal and Barabanki and also 2·18 miles of the O. & R. Railway metre-gauge line at Benares.

(b) Includes Agra-Delhi Chord, Baran-Kotah, Bhopal-Itarsi (a part of this line is owned by the Bhopal Durbar) and Cawnpore-Banda Railway.

Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
STATE LINES—*contd.*									
Kohat-Thal	62	62	62	62	62	62	62	62	62
Kolar Gold-fields*	..	..	..	..	10	10	10	10	10
Lucknow-Bareilly*	312	316	316	316	316	313	312	312	312
Madras and Southern Mahratta	2,550	2,566	2,559	2,559	2,560	2,560	2,560	2,560	2,584
Morappur-Hosur *	73	73	73	73	73	73	73	73	73
Moulmein-ye *	..	..	..	..	27	70	89	89	89
Nilgiri*	29	29	29	29	29	29	29	29	29
North-Western	3,785	3,984	4,084	4,076	4,075	4,075	4,101	4,432	4,535
Palanpur-Deesa*	17	17	17	17	17	17	17	17	17
Purulia-Ranchi*	115	115	115	115	115	115	115	117	117
Pyinmana-Taungdwingyi*	..	..	..	10	10	67	67	67	92
Raipur-Dhamtari *	57	57	57	57	57	57	57	57	57
South Indian*	1,327	1,327	1,327	1,318	1,317	1,317	1,317	1,353	1,508
Southern Shan States*	70	87	87	87	87	87	86	86	86
Travancore British section	50	50	50	50	50	50	50	50	50
Tirhoot*	815	815	814	812	813	815	808	809	807
Tirupattur-Krishnagiri*	25	25	25	25	25	25	25	25	25
Trans Indus (Kalabagh-Bannu)	135	135	162	162	162	102	162	162	162
Tumsar-Tirodi Light *	46	46	46	46	47	47	47	47	47
ASSISTED COMPANIES.									
Ahmedabad-Parantij	89	89	89	89	89	89	89	89	89
Ahmadpur-Katwa	32	32	32	32	32	32	32	32	32

* Worked by a Company.

Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
ASSISTED COMPANIES—*contd.*									
Amritsar-Patti	54	54	54	54	54	54	54	54	54
Arrah-Sasaram Light	65	65	65	65	65	65	65	65	65
Bankura-Damodar River	60	60	60	60	60	60	60	60	60
Baraset-Basirhat Light	52	52	52	52	52	52	52	52	52
Barsi Light	117	117	117	117	117	118	118	118	203
Bengal and North-Western	1,249	1,248	1,248	1,248	1,250	1,251	1,270	1,270	1,270
Bengal Dooars	158	158	158	158	157	157	157	156	156
Bezwada-Masulipatam *	52	52	52	52	52	52	52	52	52
Bukhtiarpur-Behar Light	33	33	33	33	33	33	33	33	33
Burdwan Katwa	32	32	32	32	32	32	32	32	32
Champaner-Shivrajpur Pani Light *	32	33	33	33	31	31	31	31	31
Chaparmukh-Silghat *	51	51	51	51	51	51	51	51	51
Darjeeling-Himalayan	51	51	51	51	51	51	51	51	51
" " Extension	95	95	95	95	95	95	95	95	95
Dasghara-Jamalpurgunj *	8	8	8	8	8	8	8	8	8
Dehri-Rohtas Light	24	24	24	24	24	24	24	24	26
Dhond-Baramati*	27	27	27	27	27	27	27	27	27
Dibru-Sadiya	86	86	86	86	86	86	86	86	86
Ellichpur-Yeotmal*	118	118	118	118	118	118	118	118	118
Futwah-Islampur	..	..	27	27	27	27	27	27	27
Godhra-Lunavada *	25	25	25	25	25	25	25	25	25
Hardwar-Dehra †	32	32	32	32	32	32	32	32	32
Howrah-Amta Light	44	44	44	44	44	44	44	44	44
Howrah-Sheakhala Light	20	20	20	20	20	20	20	20	20
Jacobabad-Kashmor*	77	77	77	77	77	77	77	77	77

* Worked by a Company.
† Worked by State Railway Agency.

Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
ASSISTED COMPANIES—*contd.*									
Jamnagar and Dwarka	..	..	..	66	66	66	66	66	66
Jessore-Jhenidah	37	37	37	37	37	37	37	37	37
Jullundar Doab †	130	130	130	133	133	133	133	133	133
Jullundur-Mukerian †	45	45	45	45	45	45	45	45	45
Kalighat Falta	25	26	26	26	26	26	26	26	26
Katakhal-Lalabazar *	..	..	..	..	24	23	23	23	23
Khulna Bagerhat †	20	20	20	20	20	20	20	20	20
Larkana-Jacobabad †	..	..	32	32	53	53	53	53	53
Mandra-Bhaun †	46	46	46	46	46	46	46	46	46
Matheran Light *	13	13	13	13	13	13	13	13	13
Mayurbhanj (*a*)	..	71	71	71	71	71	71	71	71
Mirpur Khas-Jhudo *	50	50	50	50	50	50	50	50	50
Mirpur Khas-Khadro *	50	50	50	50	50	50	50	50	50
Mymensing-Bhairab Bazar *	101	101	101	101	101	101	101	101	101
Nadiad-Kapadvanj *	28	30	30	30	28	28	28	28	28
Pachora-Jamner *	35	35	35	35	35	35	35	35	35
Phagwara-Rahon †	45	45	45	45	45	45	45	45	45
Podanur Pollachi *	25	25	25	25	25	25	25	25	25
Pulgaon-Arvi *	22	22	22	22	22	22	22	22	22
Rohilkhand and Kumaon	259	259	259	259	259	259	259	259	259
Sara-Sirajganj †	53	53	53	53	53	53	53	53	53
Shahdara (Delhi) Saharanpur Light	93	93	93	93	93	93	93	93	93
Sialkot Narowal †	38	38	38	38	38	38	38	38	39
South Behar *	79	79	79	79	79	79	79	79	79
Southern Punjab †(*b*)	578	578	577	579	581	581	581	581	581
Suramangalam-Salem *	4	4	4	4	4	4	4	4	4

* Worked by a Company. † Worked by State Railway Agency.
(*a*) Shown under "Indian State Lines" Up to 1919-20. (*b*) Includes Ludhiana Extension.

Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
ASSISTED COMPANIES—*concld.*									
Sutlej Valley †	..	..	..	..	127	127	213	213	213
Tanjore District Board*	135	135	135	131	131	131	131	131	131
Tapti Valley *	156	156	156	156	156	156	156	156	156
Tenali-Repalli *	21	21	21	21	21	21	21	21	21
Tezpur-Balipara	20	20	20	20	20	20	20	20	20
Tinnevelly-Tiruchendur *	..	..	..	38	38	38	38	38	38
UNASSISTED COMPANIES.									
Bengal Provincial	33	33	33	33	33	33	33	33	33
Jagadhri Light	3	3	3	3	3	3	3	3	3
Kulasekarapatnam Light	32	32	18	24	25	25	25	25	25
Ledo and Tikak Margherita Colliery	6	6	6	6	6	6	6	6	
Trivellore Light	..	..	2	2	2	2	2	2	2
INDIAN STATE LINES.									
Kazipet Balharshah	..	..	..	..	47	58	58	58	93
Bangalore-Chik Ballapur Light	39	39	39	39	39	39	39	39	39
Bhavnagar	206	217	240	283	283	283	284	284	297

* Worked by a Company. † Worked by State Railway Agency.

Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
INDIAN STATE LINES—*contd.*										
Bhopal-Ujjain*	113	113	113	113	113	113	113	113	113	113
Bikaner	498	498	498	498	526	568	569	604	619	699
Bina-Goona-Baran*	147	147	147	147	147	147	147	147	147	147
Bodeli-Chota Udaipur	23	23	23	23	23	23	23	23	23	23
Cooch-Behar §	33	33	33	33	33	33	33	33	33	33
Cutch	37	37	37	37	37	37	37	37	37	52
Dholpur-Bari	36	36	36	36	36	36	36	36	36	36
Dhrangadra	43	40	40	40	40	54	54	54	54	54
Gaekwar's Baroda State	..	..	..	..	..	316	316	316	318	318
Gaekwar's Mehsana*	163	163	231	231	231	230	230	230	230	230
Gondal-Porbandar	(*b*)148	(*b*) 106	106	106	106	106	106	106	106	106
Gwalior Light*	250	250	250	250	250	250	252	253	253	253
Hindupur*	51	51	51	51	51	51	51	51	52	52
Hingoli Branch*	50	50	50	50	50	50	50	50	50	50
Hyderabad-Godavari Valley*	391	391	391	391	391	386	386	386	386	386
Jaipur*	122	122	122	122	139	156	179	179	181	181
Jammu and Kashmir §	16	16	16	16	16	16	16	16	16	16
Jamnagar Rajkot	54	54	54	54	54	54	54	54	54	54
Jetalsar-Rajkot	46	46	46	46	46	46	46	46	46	46
Jind-Panipat *	26	26	26	26	26	26	26	26	26	26
Jodhpur	609	609	609	609	609	609	609	618	618	618
Junagad	136	140	141	141	141	148	148	148	148	148
Khanpur-Chachran §	22	22	22	22	22	22	22	22	22	22
Karipalli-Kothagudam	..	..	..	..	..	..	..	..	25	25
Khijadiya-Dhari*	37	37	37	37	37	37	37	37	37	37
Kolar District	64	64	64	64	64	64	64	64	64	64
Kolhapur*	29	29	29	29	29	29	29	29	29	29
Ludiahna-Dhuri-Jakhal §	79	79	79	79	79	79	79	79	79	79

* Worked by a Company. § Worked by State Railway Agency. (*b*) Includes Porbandar State Railway.

Mileage of Railway Lines in India open for Traffic at end of year—*concld.*

Railways.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24	1924-25.	1925-26.	1926-27.	1927-28.
INDIAN STATE LINES—*concld.*										
Mohari-Barauli	15	15	15	15	15	15	15	15	15	15
Morvi	93	93	93	93	93	93	90	90	102	102
Mysore-Arsikere	103	103								
Mysore-Bangalore	..	‡ 86	204(*a*)	204 (*a*)	204 (*a*)	263 (*a*)	263	263	285	285
Mysore-Nanjangud*	16	16								
Tarikare-Narasimharajapura Light	26	27	27	27	27	27	27	27	27	27
Nagda-Ujjain*	33	33	33	33	33	33	33	35	35	35
Nizam's Guaranteed (*b*)	330	330	330	330	330	330	330	330	330	330
Okhamandal *	..	..	..	..	37	37	37	37	37	37
Parlakimedi Light*	25	25	25	25	25	25	25	25	25	25
Petlad-Cambay*	34	34	34	34	34	34	34	34	34	34
Pipar Bilara Light	25	25	25	25	25	25	25	25	25	25
Porbandar-State	..	41	41	41	41	41	41	41	41	41
Rajpipla*	39	39	39	39	39	39	39	39	39	39
Rajpura-Bhatinda §	108	108	108	108	108	108	108	109	109	109
Sangli*	5	5	5	5	5	5	5	5	5	5
Secunderabad-Gadwal *	103	104	109	109	117	117	117	145	145	145
Sirhind-Rupar §	..	..	..	..	..	..	..	..	..	..
Shoranur-Cochin*	65	65	65	65	64	65	65	65	65	65
Travancore (Indian Section)	96	96	96	96	96	96	96	96	96	96
Udaipur-Chitorgarh	67	67	67	67	67	67	67	67	67	67
FOREIGN LINES.										
Peralam-Karaikkal*	15	15	15	15	15	15	15	15	15	15
Pondicherry*	8	8	8	8	8	8	8	8	8	8
West of India Portuguese*	51	51	51	51	51	51	51	51	51	51
Grand Total	36,616	36,735	37,029	37,266	37,618	38,039	38,270	38,579	39,049	39,712

† Worked by a Company. ‡ Formerly worked as part of the Mysore Section of M. & S. M. Railway. § Worked by State Railway Agency.

(*a*) Now called Mysore Railway.

(*b*) Although shown under Indian State Lines this is a Company's Line guaranteed by an Indian State.

Mines and Minerals.

Total value of Minerals for which returns of Production are available for the years 1926 and 1927.

—	1926. (£1= Rs. 13.4.)	1927. (£1= Rs. 13.4.)	Increase.	Decrease.	Variation per cent.
	£	£	£	£	
Coal	7,574,599	7,079,852	....	494,747	—6.4
Petroleum	7,305,509	4,421,468	....	2,884,041	—39.5
Manganese-ore (*a*) ..	2,590,357	2,844,237	253,880	....	+9.5
Lead and lead-ore ..	1,666,587	1,641,095	....	25,492	—1.5
Gold..	(*c*) 1,624,238	1,626,913	2,675	....	+0.2
Building materials ..	860,558	914,187	53,629	....	+6.2
Salt	836,830	849,265	12,435	....	+1.5
Silver	663,063	708,846	45,783	....	+6.9
Mica (*b*)	820,901	691,341	....	129,560	—15.8
Zinc-ore (*b*)..	321,177	522,737	201,560	....	+62.8
Tin and tin-ore	455,362	493,864	38,502	....	+8.4
Iron-ore	349,676	380,735	31,059	....	+8.8
Copper-ore and matte ..	362,566	344,299	....	18,267	—5.0
Saltpetre (*b*)	98,846	113,632	14,786	....	+14.9
Chromite	30,810	65,743	34,933	....	+113.4
Tungsten-ore	57,535	42,537	....	14,998	—26.1
Ilmenite	7,587	33,443	25,856	....	+340.8
Jadeite (*b*)	35,091	22,570	....	12,521	—35.6
Ruby, sapphire and spinel	34,834	20,883	....	13,951	—40.6
Clays	32,807	19,819	....	12,988	—39.6
Magnesite	26,444	17,115	....	9,329	—35.3
Nickel speiss	....	10,073	10,073	....	....
Antimonial lead	23,918	9,930	....	13,988	—58.5
Zircon	2,987	8,129	5,142	....	+172.1
Steatite	11,213	7,816	....	3,397	—30.3
Gypsum	(*c*) 5,929	6,702	773	....	+13.0
Monazite	947	3,810	2,863	....	+302.3
Diamonds	2,131	3,354	1,223	....	+57.4
Bauxite	2,744	2,107	....	637	—23.2
Ochre	(*c*) 2,252	2,051	....	201	—8.9
Amber	1,599	2,028	429	....	+26.8
Refractory materials ..	1,624	2,025	401	....	+24.7
Alum	3,761	1,728	....	2,033	—54.5
Fuller's earth	1,761	1,687	....	74	—4.2
Asbestos	786	1,011	225	....	+28.7
Antimony-ore	201	784	583	....	+290.0
Apatite	804	750	....	54	—6.7
Barytes	690	738	48	....	+7.0
Corundum	342	598	256	....	+74.8
Soda	285	33	....	252	—88.4
Bismuth	....	10	10	....	....
Borax	2	1	....	1	—50.0
Copperas	2	1	....	1	—50.0
Beryl	7	....	....	7	....
Serpentine	3	....	....	3	....
Total ..	25,819,365	22,919,947	737,124	3,636,542	—11.2
			—2,899,418		

(*a*) Value f.o.b. (*b*) Export values. (*c*) Revised.

The feature which stands out most prominently in a survey of the mineral industries of India is the fact that until recent years little has been done to develop those minerals which are essential to modern metallurgical and chemical industries, while most striking progress has been made in opening out deposits from which products are obtained suitable for export, or for consumption in the country by what may conveniently be called direct processes. In this respeet India of to-day stands in contrast to the India of a century ago. The European chemist armed with cheap supplies of sulphuric acid and alkali, and aided by low sea freights and increased facilities for internal distribution by the spreading network of railways has been enabled to stamp out, in all but remote localities, the once flourishing native manufactures of alum, the various alkaline compounds, blue vitriol, copperas, copper, lead, steel and iron, and seriously to curtail the export trade in nitre and borax. The reaction against that invasion is of recent date. The high quality of the native-made iron, the early anticipation of the processes now employed in Europe for the manufacture of high-class steels, and the artistic products in copper and brass gave the country a prominent position in the ancient metallurgical world, while as a chief source of nitre India held a position of peculiar political importance until, less than forty years ago, the chemical manufacturer of Europe found among his by-products, cheaper and more effective compounds for the manufacture of explosives.

With the spread of railways, the development of manufactures connected with jute, cotton and paper; and the gradually extended use of electricity the demand for metallurgical and chemical products in India has steadily grown. Before long the stage must be reached at which the variety and quantity of products required, but now imported, will satisfy the conditions necessary for the local production of those which can be economically manufactured only for the supply of groups of industries.

Coal.

Most of the coal raised in India comes from the Bengal and Bihar and Orissa—Gondwana coal-fields. Outside Bengal and Bihar and Orissa the most important mines are those at Singareni in Hyderabad, and in Central Provinces but there are a number of smaller mines which have been worked at one time or another.

The subjoined statement shows the production of all mines in British India and in Indian States during 1927, as compared with 1926:—

Province.	1926.	1927.
	Tons.	Tons.
Assam	301,061	323,342
Baluchistan	15,586	14,444
Bengal	5,137,688	5,554,990
Bihar and Orissa ..	13,955,775	14,517,866
Central India	216,708	217,661
Central Provinces ..	635,252	666,758
Hyderabad	637,779	707,213
Punjab	68,043	62,704
Rajputana	31, 275	17,358
Total ..	20,999,167	22,082,336

Coal Prices.—The value of the coal produced in India is reported annually by mine-owners. It represents the actual or estimated wholesale price of coal at the pit's mouth.

The total value of the coal produced in India decreased from Rs. 10,14,99,634 (£7,574,599) in 1926 to Rs. 9,48,70,013 (£7,079,852) in 1927.

There was a further reduction in the pit's mouth value per ton of coal for India as a whole from Rs. 4-13-4 to Rs. 4-4-9, but in contrast to the previous year all provinces did not participate in this fall. In the two great coal provinces Bihar and Orissa and Bengal, the value dropped by Rs. 0-9-7 and Rs. 0-12-7 respectively. In the Central Provinces it fell by Rs. 0-13-7; in Central India the fall was Rs. 0-2-10, and in the Punjab Rs. 0-2-3. The maximum fall, Rs.. 1-1-1, was in Baluchistan.

Labour in the Coal Mining Industry.

The average number of persons employed in the coalfields during 1927 showed an appreciable decrease in spite of the substantial increase in production. The average output per person employed, therefore, again showed an advance on the previous year, the figure of 110.5 tons for 1925 rising to 113.1 tons for 1926 and 122 3 tons in 1927; the figures for the last two years are higher than has previously been recorded, and indicate a higher average grade of efficiency in the mines at work than has hitherto been attained. This increased output per person employed is specially marked in Assam, Bengal, Bihar and Orissa, the Central Provinces and Hyderabad.

There was, however, a small increase in the number of *deaths by accident;* these amounted to 196, which is, nevertheless, a considerable improvement on the annual average for the quinquennium 1919-23, which was 274; in addition, it relates to production $2\frac{1}{3}$ million tons in excess of the average for 1919-23. The death-rate was 1·1 per thousand persons employed in 1927 against 0·99 for 1926; the average figure for the period 1919-23 was 1·36.

IRON ORE.

Bengal and Bihar and Orissa are the only provinces in India in which iron ore is mined for smelting by European methods. Iron smelting, however, was at one time a widespread industry in India and there is hardly a district away from the great alluvial tracts of the Indus, Ganges and Brahmaputra in which slag heaps are not found. The primitive iron smelter finds no difficulty in obtaining sufficient supplies of ore from deposit that no European ironmaster would regard as worth his serious consideration. Early attempts to introduce European processes for the manufacture of pig-iron and steel were recorded in 1830 in the South Arcot Districts. Since that date various other attempts have been made but none proved a success before that now in operation near Barakar in Benggi. The site of the **Barakar Iron-Works** was

originally chosen on account of the proximity of both coal and ore supplies. The outcrop of iron stone shales between the coal-bearing Barakar and Raniganj stages stretches east and west from the works, and for many years the clay ironstone nodules obtainable from this formation formed the only supply of ore used in the blast furnaces. Recently magnetite and hematite have been obtained from the Manbhum and Singhbhum districts, and the production from the lastnamed district has largely replaced the supplies of ore hitherto obtained near the iron-works. The Bengal Iron and Steel Company, Limited, have now given up the use of ores obtained from the neighbourhood of Barakar and Raniganj and are now obtaining most of their ores from the Kolhan Estate, Singhbhum. Some years ago the Bengal Iron Steel Co., Ltd., secured two deposits of iron-ore in Saranda (Singhbhum) forming parts of two large hill masses known as Notu Buru and Buda Buru respectively. Recent prospecting in this part of Singhbhum has led to the discovery of numerous additional deposits of iron-ore, the extension of which has been traced into Keonjhar and Bonal States in Orissa, a total distance of some 40 miles in a S. S. W. direction. At Pansira Buru, a portion of Notu Buru, the deposit has been opened up, and now feeds the Barakar ironwork. Pansira Buru rises to over 2,500 feet above sea level, the low ground on the west side being at about 1,100 feet above sea-level. The uppermost 400 to 450 feet of this hill has now been opened up, and the workings indicate the existence of a deposit about a quarter of a mile long, perhaps 400 feet thick and proved on the dip for about 500 feet. The ore body appears to be interbedded with the Dharwar slates, from which it is separated by banded hematite-jaspers. The ore itself is high-grade micaceous hematite, often lateritised at the outcrop. Cross-cut into the interior of the deposit show that the hæmatite becomes very friable not far below the outcrop. In fact the characteristics of this ore, including the surface lateritisation, are almost exactly reproduced in the iron-ore deposits of Goa and Ratnagiri. **The Tata Iron and Steel Company** at Sakchi possesses slightly richer and purer ore-bodies in the Raipur district, supplies of ore are at present drawn from the deposits in Mayurbhanj. The ore-deposits have all been found to take the form of roughly lenticular leads or bodies of hæmatite, with small proportions of magnetite, in close association with granite on the one hand and granulitic rocks on the other.

Quantity and value of Iron-ore produced in India during the years 1926 and 1927.

—	1926.			1927.		
	Quantity.	Value (£1=Rs. 13.4).		Quantity.	Value (£1=Rs. 13.4).	
	Tons.	Rs.	£	Tons.	Rs.	£
Bihar and Orissa—						
Keonjhar	..	..	..	36,325	(a) 1,08,975	8,132
Mayurbhanj ..	1,041,929	31,25,787	233,267	692,137	20,76,411	154,956
Sambalpur	569	3,930	293	561	3,930	293
Singhbhum	552,079	12,84,922	95,890	1,007,037	25,34,346	189,130
Burma—						
Northern Shan States ..	(a) 48,089	1,92,356	14,355	61,062	(a) 2,44,248	18,228
Central India	230	1,406	105	230	1,410	105
Central Provinces	972	3,987	298	918	3,846	287
Mysore	(b) 15,427	73,278	5,468	48,465	1,28,695	9,604
Total ..	1,659,295	46,85,666	349,676	1,846,735	51,01,861	380,735

(a) Estimated. (b) Excludes 1,909 tons of hæmatite quartzite.

The Production of iron-ore in India has been steadily on the increase in 1927 there was an increase over the previous year of 11·3 per cent., amounting to 187,440 tons.

The output of iron and steel by the *Tata Iron and Steel Co., Ltd.*, at Jamshedpur works again showed an increase; the production of pig-iron rose from 609,429 tons in 1926 to 624,028 tons in 1927, and of steel (including steel rails) from 360,980 tons in 1926 to 414,738 tons in 1927; but the production of ferro-manganese fell from 10,503 tons in 1926 to 5,092 tons in 1927. The production of pig-iron by the Bengal Iron Co., Ltd., recovered from the low figures of 52,674 tons in 1925 and 20,050 tons in 1926 to 132,649 tons in 1927; their output of products made from this pig-iron increased however, from 44,454 tons of sleepers and chairs and 26,364 tons of pipes and other castings in 1926 to 61,494 tons and 26,431 tons respectively in 1927. There was a large increase in the production of pig-iron by the Indian Iron and Steel Co., Ltd., from 253,431 tons in 1926 to 363,516 tons in 1927.

The Mysore Iron Works commenced producing pig-iron in 1923, when the quantity manufactured amounted to 9,732 tons; in 1927-28 the output of pig-iron mounted to 19,858 tons against 19,523 tons in 1926.

The number of indigenous furnaces that were at work in the Central Provinces during the year 1927 for the purpose of smelting iron-ore was 5 less than in the previous year; 95 furnaces were operating in the Bilaspur district, 48 in Raipur, 47 in Mandla, 11 in Drug5 3 in Saugor and 1 in Jubbulpore, making 206 in all.

There was a further increase in the **production of pig-iron** in India from 902,433 tons in 1926 to 1,140,051 tons, whilst the quantity exported rose from 309,505 tons in 1926-27 to 393,249 tons in 1927-28. Japan was the principal consumer of Indian pig-iron in 1927-28, nearly 69 per cent. of the total exports going to that country. There was a very slight rise in the export value, which was Rs. 45·1 (£3·37) per ton in 1926-27 and Rs. 45.4 (£3.39) in the following year.

The Steel Industry (Protection) Act 1924-Act No. XIV of 1924—authorised, to companies employing Indians, bounties, which were granted upon rails and fishplates wholly manufactured in British India from material wholly or mainly produced from Indian iron-ore and complying with specifications approved by the Railway Board, and upon iron or steel railway wagons a substantial portion of the component parts of which had been manufactured in British India. This Act was repealed by the Act No. III of 1927 and consequently the payment of bounties ceased on the 31st March 1927, but the Industry is protected to a certain extent by varying tariffs on different classes of imported steel.

Exports of Pig-iron from India during 1926-27 and 1927-28.

—	1926-27.			1927-28.		
	Quantity.	Value (£1=Rs. 13-4.)		Quantity.	Value (£1=Rs. 13.4).	
To—	Tons.	Rs.	£	Tons.	Rs.	£
United Kingdom ..	16,159	7,29,617	54,449	21,060	9,51,223	70,987
Germany	2,868	1,29,086	9,633	12,227	5,50,157	41,057
Italy	858	38,607	288	2,958	1,33,931	9,995
China	7,616	3,31,296	24,724	4,009	2,25,365	16,817
Japan	234,529	1,05,71,787	788,939	[270,936	1,23,54,921	922,009
United States of America	40,733	18,33,744	1,36,847	65,064	29,22,187	218,074
Other Countries ..	6,742	3,29,146	27,156	16,975	7,37,350	55,026
Total ..	309,505	1,39,63,283	1,042,036	393,249	1,78,75,134	1,333,965

MANGANESE ORE.

This industry commenced some thirty years ago by quarrying the deposits of the Vizagapatam district, and from an output of 674 tons in 1892, the production rose rapidly to 92,008 tons in 1900 when the richer deposits in the Central Provinces were also attacked, and are now yielding a larger quantity of ore than the Vizagapatam mines. The most important deposits occur in the Central Provinces, Madras, Central India, and Mysore—the largest supply coming from the Central Provinces. The uses to which the ore is put are somewhat varied. The peroxide is used by glass manufacturers to destroy the green colour in glass making, and it is also used in porcelain painting and glazing for the brown colour which it yields. The ore is now used in the manufacture of ferro-manganese for use in steel manufacture. Since 1904, when the total output was 150,190 tons, the progress of the industry has been remarkable owing to the high nrices prevailing.

Record Output in 1927.—A rise in the output of manganese ore in India has again to be recorded, the total for 1926, 1,014,928 tons, valued at £2,590,357 f.o.b Indian ports, rising to 1,129,353 tons, valued at £2,844,237 f.o.b. Indian ports during 1927. The figures for output in 1926 and 1927 are the highest yet recorded and exceed that for 1907, when 902,291 tons were raised. It will be noticed that concurrently with a rise in output there was, also in contrast to the change recorded, in the previous year, a rise in value the total value for 1927 being £253,880 greater than that for 1926. In 924 first-grade ore c.i.f. United Kingdom ports fetched an average price of 22.9*d.* per unit; in 1925 this price fell to 21.5*d.* and in 1926 to 18*d.* During 1927 the price fell from 19. 9*d.* in January to 16.5*d.* in September and recovered to 17*d.* in December the average for the year being again 18*d.* Consequently the increase in total value is proportionate to the increase in total quantity.

Quantity and value of Manganese-ore produced in India during 1926 and 1927.

—	1926.		1927.	
	Quantity.	Value f.o.b. at Indian ports.	Quantity.	Value f.o.b. at Indian ports.
	Tons.	£	Tons.	£
Bihar and Orissa—				
Gangpur State	10,379	26,856	7,960	20,928
Keonjhar State	23,810	47,322	51,115	103,721
Singhbhum	2,473	6,399	9,970	26,213
Bombay—				
Chhota Udaipur..	10,000	25,500	11,729	30,398
Belgaum	4,290	10,100	4,515	11,871
North Kanara	2,000	5,175	4,005	10,530
Panch Mahals	57,325	148,328	78,802	207,184
Central India—				
Jhabua State	7,969	16,901	10,510	22,728
Central Provinces—				
Balaghat	336,579	921,385	313,556	871,424
Bhandara	152,858	418,449	130,211	361,878
Chhindwara	42,242	115,637	47,264	131,355
Jubbulpore	100	274	181	503
Nagpur	229,586	628,492	252,637	702,120
Madras—				
Bellary	8,853	14,054	6,004	9,782
Sandur State	77,327	122,757	138,196	225,144
Vizagapatam	21,698	37,339	31,992	56,386
Mysore State—				
Chitaldrug	1,599	2,645	4,021	6,819
Shimoga	23,032	38,099	23,658	40,120
Tumkur	2,808	4,645	3,027	5,133
Total ..	**1,014,928**	2,590,357	**1,129,353**	2,844,237

GOLD.

The greater part of the total output of gold in India is derived from the Kolar gold field in Mysore. During the last decade the production of this mine reached its highest point in 1905 when 616,758 ounces were raised. In 1906 the quantity won was 565,208 ounces and this figure fell to 535,085 ounces in 1907. The figures for the latter years reveal a small improvement. The Nizam's mine at Hutti in Hyderabad comes next, but at a respectable distance, to the Kolar gold field. This mine was opened in 1903. The only other mines from which gold was raised were those in the Dharwar district of Bombay and the Anantapur district of Madras. The Dharwar mines gave an output of 2,993 ounces in 1911 but work there ceased in 1912. The Anantapur mines gave their first output of gold during the year 1910; the amount being 2,532 ounces, valued at Rs.1,51,800. Gold mining was carried on in the North Arcot district of Madras from 1893 till 1900, the highest yield (2,854 ounces) being obtained in the year 1898. The Kyaukpazat mine in Upper Burma was worked until 1903, when the pay chute was lost and the mine closed down. In 1902 dredging operations were started on the Irrawaddy river near Myitkyina, and 216 ounces of gold were obtained in 1904; the amount steadily increased from year to year and reached 8,445 ounces in 1909, but fell in subsequent years until, in 1922, it was no more than 24 oz. The small quantity of gold produced in the Punjab, the Central Provinces, and the United Provinces is obtained by washing. Gold washing is carried on in a great many districts in India, but there is no complete record of the amount obtained in this way. The average earnings of the workers are very small, and the gold thus won is used locally for making jewellery.

Quantity and value of Gold produced in India during the years 1926 and 1927.

—	1926.			1927.			Labour.
	Quantity.	Value (£1=Rs. 13.4).		Quantity	Value (£1=Rs. 13.4).		
	Ozs.	Rs.	£	Ozs.	Rs.	£	
Bihar and Orissa—							
Singhbhum ..	123.0	6,600	493	..	..	..	..
Burma—							
Katha ..	24.2	1,491	111	11.5	778	58	8
Upper Chindwin.	122.4	11,127	830	48.2	4,169	311	115
Kashmir	46.7	1,995	149	48.0	2,048	153	128
Madras—							
Anantapur ..	(*a*) 930.0	53,219	3,972	(*a*)2,395.0	1,37,320	10,248	411
Mysore	(*a*) 382,899·3	2,16,89,632	1,618,629	(*a*)381,723.0	2,16,54,394	1,615,999	18,918
Punjab	8.8	444	33	42.5	1,645	123	60
United Provinces.	4.1	275	21	4.3	275	21	16
Total ..	384,158.5	2,17,64,783	1,624,238	384,272.5	2,18,00,629	1,626,913	19,656

(*a*) Fine gold.

PETROLEUM.

Petroleum is found in India in two distinct areas—one on the east, which includes Assam, Burma, and the islands off the Arakan coast. This belt extends to the productive oil fields of Sumatra, Java, and Borneo. The other area is on the west, and includes the Punjab and Baluchistan, the same belt of oil-bearing rocks being continued beyond the borders of British India to Persia. Of these two the eastern area is by far the most important, and the most successful oil-fields are found in the Irrawaddy valley. Yenangyaung is the oldest and most developed of these fields. Native wells have been at work here for over 100 years, and to 1886, prior to the annexation of Upper Burma, the output is estimated to have averaged over 2 million gallons a year. Drilling was begun in 1887. The Yenangyat field yielded a very small supply of petroleum before 1891, in which year drilling was started by the Burma Oil Company. Singu now holds the second place among the oil-fields of India. Petroleum was struck at the end of 1901, and in 1903, 5 million gallons were obtained. In 1907 and 1908 the production of this field was 43 million gallons, and after a fall to 31½ million gallons in 1910 it rose to 56½ million gallons in 1912. Several of the islands off the Arakan coasts are known to contain oil deposits but their value is uncertain. About 20,000 gallons were obtained from the eastern Barongo Island near Akyab, and about 37,000 gallons from Ramri Island in the Kyaukpyu district during 1911. Oil was struck at Minbu in 1910, the production for that year being 18,320 gallons which increased to nearly 4 million gallons in 1912. The existence of oil in Assam has been known for many years and an oil spring was struck near Makum in 1867. Nothing more, however, was done until 1883, and from that year up till 1902 progress was slow. Since that year the annual production has been between 2½ and 4 million gallons.

On the west, oil springs have been known for many years to exist in the Rawalpindi and other districts in the Punjab. In Baluchistan geological conditions are adverse, and though some small oil springs have been discovered, attempts to develop them have not hitherto been successful.

Output in 1927.—The world's production of petroleum in 1926 amounted to a little over 151½ million tons, of which India contributed 0.79 per cent. In 1927 the world's production jumped to some 171 million gallons, of which the Indian proportion on a practically stationary production fell to 0.72 per cent. India is now eleventh on the list of petroleum producing countries.

Petroleum statistics prove that it is becoming more and more difficult to maintain the output of India (including Burma) at the high levels it reached in 1919 and 1921 when peak productions of well over 305½ million gallons were reached. During 1927, the total production amounted to a little over 281 million gallons against less than 280½ million gallons in 1926 and a little over 289½ million gallons in 1925. Although, therefore, there has not been an actual decrease, this can only be regarded as an arrest in the decline that has set in, and which, with possible interruptions, is likely to continue slowly and steadily during the present generations unless a new field of importance is discovered. The chances of the latter recede year by year as exhaustive geological research continues to prove fruitless.

Quantity and Value of Petroleum produced in India during the years 1926 and 1927.

—	1926.			1927.		
	Quantity	Value (£1=Rs. 13.4)		Quantity.	Value (£1=Rs. 13.4).	
	Gals.	Rs.	£	Gals.	Rs.	£
Assam—						
Badarpur ..	3,210,838	6,77,068	50,527	1,912,593	4,98,937	37,234
Digboi ..	20,88,697	35,68,314	266,292	22,604,187	38,59,866	288,050
Masimpur ..	..	..	..	25,485	6,648	496
Burma—						
Akyab ..	6,331	2,191	164	5,627	1,948	145
Kyaukpyn ..	15,103	15,946	1,190	15,452	15,687	1,171
Minbu ..	4,533,420	10,15,297	75,769	5,199,950	11,10,406	82,866
Singu ..	95,745,504	3,59,04,564	2,679,445	98,691,437	2,09,71,930	1,565,069
Thayetmyo ..	974,620	2,18,274	16,289	999,500	2,12,394	15,850
Upper Chindwin	1,255,840	94,188	7,029	1,825,120	1,36,884	10,215
Yenangyat ..	1,778,041	3,39,865	25,363	1,844,946	3,84,359	28,685
Yenangyaung	145,731,612	5,45,00,540	4,067,204	137,322,012	2,93,81,716	2,192,665
Punjab—						
Attock ..	6,230,320	15,57,580	116,237	10,667,600	26,66,900	199,022
Total ..	280,369,326	9,78,93,827	7,305,509	281,113,909	5,92,47,675	4,421,468

Imports of Kerosene Oil into India during the years 1926 and 1927.

—	1926.			1927.		
	Quantity.	Value £1=Rs. 13.4.)		Quantity.	Value (£1=Rs. 13.4).	
	Gals.	Rs.	£	Gals.	Rs.	£
From—						
Borneo	6,291,079	36,66,389	273,611	7,734,388	40,11,512	299,367
Georgia ..	..	..	..	10,248,988	59,88,067	446,871
Russia	..	..	..	2,329,308	16,74,189	124,939
Straits Settlements (including Labuan)..	3,726,437	22,27,811	166,254	5,294,469	23,05,617	172,061
Sumatra ..	915,971	6,37,814	47,598	13,000	13,338	995
United States of America ..	58,325,929	3,93,34,516	2,935,412	60,250,875	4,04,81,594	3,021,015
Other Countries..	51,820	46,401	3,463	2,287,599	9,79,932	73,129
Total ..	69,311,236	4,59,12,931	3,426,338	88,158,627	5,54,54,249	4,138,377

Amber, Graphite and Mica.—Amber is found in very small quantities in Burma, the output for 1927 being 70·6 cwts. valued at Rs. 27,180. Graphite is found in small quantities in various places but little progress has been made in mining except in Travancore. The total output in 1921 was 25 tons. India has for many years been the leading producer of mica, turning out more than half of the world's supply. In 1914, owing to the war, the output was only 38,189 cwts. compared with 43,650 cwts. in 1913. Owing to necessary restrictions with regard to the export of mica, the output fell off considerably in the year 1915, but subsequent demand in the United Kingdom for the best grade of ruby mica led to a considerable increase in production during the following years.

There was a small increase in the declared production of mica from 41,924 cwts. valued at Rs. 22,19,367 (£165,624) in 1926 to 42,614 cwts. valued at Rs. 24,52,055 (£182,989) in 1927. But the output figures are incomplete, and a more accurate idea of the size of the industry is to be obtained from the export figures. In both the years 1926 and 1927 the quantity exported was roughy double the reported production. The United States of America and the United Kingdom, which are the principal importers of Indian mica absorbed 52 per cent. and 35 per cent. respectively of the total quantity exported during 1926 and 23.7 per cent. and 49.4 per cent. respectively during 1927. During this latter year Germany took 14.2 per cent. of the quantity exported. The average value of the mica exported fell slightly from Rs. 122 (£9.1) per cwt. in 1926 to Rs. 119.5 (£8.9) per cwt. in 1927.

Tin, Copper, Silver and Lead.—The only persistent attempt to mine tin is in Burma. The output was for some time insignificant but rose in 1913 to 116 tons valued at £46,000 which fell to £38,000 in 1914. In 1925 Burma yielded 2,308 tons. Copper is found in Southern India, in Rajputana, and at various places along the outer Himalayas, but the ore is smelted for the metal alone, no attempt being made to utilize the by-products. In 1924 the production of 2,935 tons of copper-matte valued at Rs. 15,94,527 was reported by the Burma Corporation, Ltd., in the Northern Shan States.

Works at the Mosaboni Mine of the Indian Copper Corporation, Ltd., in the Singhbhum District, was practically suspended during the year 1926, pending the raising of the capital required for the erection of the necessary concentrating, smelting, refinery and power plants. Early in 1927, the Anglo-Oriental and General Investment Trust, Ltd., London, assumed control, a sum of £350,000 was subscribed and the erection of the new plant commenced at once at the company's new site at Moubhandar Ghatsila, together with an assisted siding from the Bengal-Nagpur Railway main line at Ghatsila, and an aerial ropeway from the mine.

The ore reserves (surface and underground) now amount to 624,539 short tons, with an average assay value of 3.88 per cent. copper representing a copper content of 24,232 tons. The quantity of ore raised in 1927 was 5,000 tons valued at Rs. 2,00,000 (£14,925). This is in addition to 35,823 tons previously produced during development.

In addition there is now a regular production of copper matte at the Namtu smelting plant of the Burma Corporation, Ltd., assaying on the average about 41 per cent. of copper, 35 per cent. of lead and 70 ounces of silver to the ton. The production during 1926 was 11,441 tons valued at Rs. 44,78,064 (£334,184) and averaging 41.6 per cent. of copper and during 1927, 11,872 tons valued at Rs. 44,13,205 (£329,344) averaging 40.3 per cent. of copper. The matte is exported to Hamburg for further treatment.

In contrast to the considerable increase recorded in the previous year there was a small decrease in the production of tin-ore in Burma from 3,548 tons valued at Rs. 61,01,858 (£455,362) in 1926 to 3,495 tons valued at Rs. 66,17,773 (£493,864) in 1927. This decrease was due to decreases in the output of Tavoy and the Southern Shan States partly balanced by a further considerable increase in the output of Mergui.

The production of silver from the Bawdwin mines of Upper Burma, increased from 5,103,646 ozs., valued at Rs. 88,49,722 (£660,427) in 1926 to 6,004,437 ozs., valued at Rs. 94,67,196 (£706,507) in 1927. The output of silver obtained as a bye-product from the Kolar gold mines of Mysore decreased to the extent of 2,163 ozs.

Zinc.—A monograph on zinc ores issued by the Imperial Institute in 1917 says that during the past fifty years zinc ores have received but little attention in India, and no production was recorded until 1913. In 1914 the production was 8,553 tons, and although the output fell to 96 tons in 1915, there is a prospect of India becoming an important producer of zinc ore in the future. Important silver-lead-zinc deposits occur at Bawdwin, in Tawngpeng State one of the Northern Shan States in Upper Burma. The mines are connected with the Mandalay-Lashio Branch of the Burma railways by a narrow-gauge line 51 miles long, the lines meeting at Manhpwe, which is about 544 miles from Rangoon. They were worked for many centuries by the Chinese for silver, and have long been known to contain zinc ore; until recently, however, no serious attempt appears to have been made to market the ore for its zinc values. In 1907 the present undertaking was started by the Burma Mines, Ltd., with the idea of recovering the lead from the old slag heaps left by the Chinese, estimated at 125,000 to 160,000 tons, and later to work the deposit. Smelting operations on these slags were first carried out at Mandalay, but later the works were transferred to Namtu, about 13 miles below the mines on the narrow-gauge railway. The deposits, which comprise an area of about 2,500 acres, have now been taken over by the Burma Corporation, Ltd., and its production of zinc amounted to 58,286, tons valued at Rs. 73,19,468 (£546,229) in 1927 against 48,834 tons valued at Rs. 63,24,491 (£471,977) in 1926. The exports during 1927 amounted to 67,135 tons valued at Rs. 70,06,018 (£522,737) against 43,056 tons valued at Rs. 43,03,775 (£321,177) in the preceding year.

Gem Stones.—The only precious and semi-precious stones at present mined in India are the diamond, ruby, sapphire, spinel, tourmaline garnet, rock-crystal, agate, cornelian, jadeite

and amber. The production of diamonds in Central India rose from 68.60 carats valued at Rs. 28,559 (£2,131) in 1926 to 112.74 carats valued at Rs. 44,943 (£3,354) in 1927. Amber has already been referred to ; of the rest only the ruby, sapphire and jadeite attain any considerable value in production and the export of the latter has declined owing to the disturbances in China, which is the chief purchaser of Burmese, jadeite. The output of the ruby mines in 1924 was only 101,097 carats or less than half the average annual quantity produced during the two preceding quinquennial periods. In 1922 an exceptionally valuable ruby of nearly 23 carats was found of rare size and quality. A severe decline in the output from the Mogo- ruby mines of Upper Burma in 1924, followed in 1925 by a marked drop in value, bore witness to a serious decline in the industry. The Burma Ruby Mines, Limited, ultimately decided to go into liquidation and the mines were offered for sale in September, 1926. The skeleton organisation left in charge of the mines has, however made good use of its opportunities, with the result that the value of the output in 1926 Rs. 4,66,772 exceeded that of the previous year by over a *lakh* of rupees. During 1927, however, production fell in value by over 1¾ lakhs of rupees to Rs. 2,79,834 due mainly to a decrease in the value of the sapphires (and pinels) produced, there being a slight increase in the value of the rubies won.

Radio-active Minerals.—The General Report of the Director of the Geological Survey of India for 1913 includes a brief report by R. C. Burton on an occurrence of pitchblende at mica mines near Singar, Gaya district, Bengal. The pitchblende occurs as rounded nodules in a pegmatite that is intrusive in mica schists. Other minerals occuring in the pegmatite are mica, triplite, ilmenite, tourmaline, and uranium ochre ; whitish columbite, zircon, and torbernite have also been recorded. Of these minerals triplite is stated to be the commonest.

The importance of the find of uranium oxide impregnating the triplite led to the discovery of weathered pitchblende, and as the pits were deepened the weathering became less and less until pure pitchblende was obtained. In the six months from July 1913 to February 1914, eight hundred weight of pitchblende was obtained from Abrakhi Hill together with six tons of uranium earth debris, five to six hundred tons of triplite and two tons of tantalite. These ores were raised under a prospecting license in respect of Abrakhi Hill alone and in March 1914, mining lease for thirty years was obtained in respect of sixty square miles of the Singar estate. The first intention was to work only the five square miles round Abrakhi and a syndicate was formed for this purpose, which on the outbreak of war, was refused a Trading License on account of the German element in it.

Quantity and value of Salt produced in India during the years 1926 *and* 1927.

	1926.			1927.		
	Quantity.	Value (£1=Rs. 13.4).		Quantity.	Value (£1=Rs. 13.4).	
	Tons.	Rs.	£	Tons.	Rs.	£
Aden	194,524	9,35,531	69,815	181,757	8,74,489	65,260
Bombay and Sind.	473,127	25,33,686	189,081	432,993	23,12,426	172,569
Burma	24,409	5,60,391	41,820	19,913	5,52,196	41,209
Gwalior (*a*) ..	176	9,267	692	435	23,362	1,743
Kashmir	1	55	4	1	56	4
Madras	481,826	42,81,239	319,496	543,081	47,63,741	355,503
Northern India ..	464,686	28,93,350	215,922	433,765	28,53,885	212,977
Total ..	1,638,749	1,12,13,519	836,830	1,611,945	1,13,80,155	849,265

(*a*) Figures relate to Official years 1926-27 and 1927-28.

The total output of rock-salt increased by 24,077 tons.

Quantity and value of Rock-salt produced in India during the years 1926 *and* 1927.

—	1926.			1927.		
	Quantity.	Value (£1=Rs. 13.4).		Quantity.	Value (£1=Rs. 13.4).	
	Tons.	Rs.	£	Tons.	Rs.	£
Salt Range	122,895	6,26,760	46,773	1,45,750	8,45,720	63,113
Kohat ..	19,224	62,138	4,637	21,161	68,225	5,092
Mandi	4,552	1,02,549	7,653	3,837	92,112	6,874
Total ..	146,671	7,91,447	59,063	170,748	10,06,057	75,079

There was a considerable increase, amounting to 121,898 tons, in the imports of salt, for which the United Kingdom, Spain, Egypt and Italian East Africa were chiefly responsible. The receipts from Germany also increased, while imports from Aden showed a small decrease.

Imports of Salt into India during the years 1926 *and* 1927.

—	1926.			1927.		
	Quantity.	Value (£1=Rs. 13.4).		Quantity.	Value (£1=Rs. 13·4.)	
	Tons.	Rs.	£	Tons.	Rs.	£
From—						
United Kingdom..	52,741	11,76,368	87,789	83,523	27,56,487	205,708
Germany	44,507	10,69,459	79,810	55,029	16,73,437	124,883
Spain	51,655	9,97,043	74,406	89,328	25,63,902	191,336
Aden and Dependencies.	187,420	36,29,761	270,878	182,696	54,40,838	406,033
Egypt	122,232	24,90,858	185,885	148,873	42,43,591	316,686
Italian East Africa	43,926	7,90,833	59,017	63,062	17,36,872	129,617
Other countries	13,317	2,83,448	21,153	15,185	4,38,786	32,745
Tota ..	515,798	1,04,37,770	778,938	637,696	1,88,53,913	1,407,008

Bibliography.—Report of the Chief Inspector of Mines in India, under the Indian Mines Act (VIII of 1901) for 1927, by the Chief Inspector of Mines. Report on the Mineral Production of India during 1928 by L. L. Fermor, Officiating Director, Geological Survey of India. Note on the Mineral Production of Burma in 1922. Monographs on Mineral Resources published by the Imperial Institute.

Stock Exchanges.

There are about 446 Share and Stock Broker in **Bombay**. They carry on business in the Brokers' Hall, bought in 1899 from the funds of the **Share and Stock Brokers' Association** formed to facilitate the negotiations and the sale and purchase of Joint Stock securities promoted throughout the Presidency of Bombay. Their powers are defined by rules and regulations framed by the Board of Directors and approved by the general body of Brokers. The Board has the power to fix the rates in times of emergencies. The official address of the Secretary is Dalal Street, Fort, Bombay.

At first the admittance fee for a broker was Rs. 5 which was gradually raised to Rs. 7,000. The fee for the Broker's card has increased and it was recently sold by public auction for Rs. 21,800. In 1921 a number of cards were sold at Rs. 40,000 each and the proceeds were employed to purchase an adjoining building for the extension of the business. This building was pulled down and the extension was completed last year. The present value of the card is about Rs. 7,000. The rules of the Association were revised in October 1916 and from the New Year the purchaser of shares has to pay the stamp and transfer fee instead of the seller. There are two classes of Exchange Brokers, Europeans and Indians, the latter being certified for recognition by the native Stock Exchange. Business in Government Paper and all other Trustees' Authorised Securities is carried on under the rules of the Bombay Stock Exchange, but in the street outside the hall.

In November 1917 a second Stock Exchange was opened in Bombay, with its headquarters in Apollo Street, known as the **Bombay Stock Exchange, Ltd.** This separate Exchange no longer functions older body; it was revived in 1922. It has ceased to function again

Committee of Enquiry.—In 1923 the Government of Bombay appointed a Committee to enquire into the constitution, government, customs, practices, rules, regulations and methods of business of the Native Share and Stock Brokers' Association of Bombay and to investigate any such complaints of the public and to make any such enquiries with reference to any of the aforesaid matters or any other matter appertaining to the aforesaid Association as the Committee may deem proper and thereafter with a view to protect the investing public against the interested or irregular control of business to formulate such definite proposals for the future constitution, control, direction and regulation of the aforesaid Association as the Committee may deem proper.

The Committee issued a report early in 1924 signed by all the members save one who appended a minority report. The majority report made several important recommendations for reform, notably one aimed at the prevention of corners and another for facilitating the handling of legitimate complaints against the brokers on the part of the public. The Association, however, adopted the minority report which leaves the constitution and practice of the Exchange very little modified.

In the middle of the year 1925 there was heavy speculation in certain mill scrips. The market was tremendously oversold, the usual crisis ensured, leading to the temporary closing of the Exchange and the suspension of all dealings and a public agitation for thorough reform arose. The brokers were at first unwilling to yield to this demand. But a threat of Government intervention and control altered their attitude. In the end, they submitted new draft rules under which wild speculation will be discouraged and the recurrence of such crisis as that indicated above will be unlikely.

For many years the **Calcutta** Share Market had its meeting place in various gullies in the business quarter and was under no control except that of established market custom. In 1908 the **Calcutta Stock Exchange Association** was formed, a building was leased in New China Bazar Street now called Royal Exchange Place, a representative committee was formed, and the existing trade customs were focussed into rules drawn up for the conduct of business. Admittance as a member of the Stock Exchange is by vote of the committee, and the entrance fee is at present Rs. 500. The market custom differs very materially from that of most other Stock Exchanges since there are no settlement days, delivery is due the second day after the contract is passed and sales of securities are effected for the most part under blank transfers. Another difference in procedure as compared with the London Stock Exchange is that there are no "Jobbers" in the Calcutta market. The Dealers who take their place, more or less, are not compelled to quote a buyer's and a seller's rate and are themselves Brokers as well as dealers, calling upon the Banks and other clients and competing with Brokers.

There are about 150 members, besides outside brokers, the former consisting of European, Jewish, Marwari, and Bengalee firms. The Marwaris predominate. The volume of *bona fide* Investment business is comparatively small and insufficient for the number of Brokers. The principal business transacted on the Calcutta Stock Exchange is connected with the shares in Jute Mills. Coal Companies, Tea Companies registered in India, Miscellaneous industrial concerns (such as Paper, Flour, Sugar). Railway and Transit Companies and Debentures, the latter comprising those of Industrial concerns and Trustees. Investment Securities, namely, Municipal and Port Trust Debentures. The association has an honorary secretary and is not at present affiliated to the Bengal Chamber of Commerce.

The **Madras** Stock Exchange situated at No. 9 Broadway consists of about 100 Members of which 25 are working Members. It was opened on 6th April 1920 and deals principally in Mill shares. Business is regulated by rules drawn up by the Directors. There is a Board of arbitration. There is an admittance membership card of Rs. 1,000 and an annual subscription of Rs. 100. The original 100 members were elected by the first Directors and each of the working members have deposited a security of Rs. 3,000.

(*b*) To encourage friendly feeling and unanimity among business community and associations on all subjects connected with the common good of Indian business.

(*c*) To enter into any arrangement with any Government or authority supreme, municipal, local or otherwise that may seem conducive to the Federation's objects or any of them, and to obtain from any such Government or authority all rights, concessions, and privileges which the Federation may think it desirable to obtain and to carry out, exercise and comply with any such arrangements, rights, privileges and concessions.

(*d*) To sell or dispose of the undertaking of the Federation or any part thereof for such consideration as the Federation may think fit and in particular for shares, debentures or securities of any other company having objects altogether or in part similar to those of this Federation.

(*e*) To take or otherwise acquire and hold shares in any other company having objects altogether or in part similar to those of this Federation.

(*f*) To undertake and execute any trusts the undertaking of which may seem to the Federation desirable either gratuitously or otherwise.

(*g*) To draw, make, accept, discount, execute and issue bills of exchange, promissory notes, bills of lading, warrants, debentures and other negotiable or transferable instruments or securities.

The Rules provide for two classes of members, *viz.*, numbers consisting of Chambers of Commerce (Subscription Rs. 300) and others consisting of Commercial Associations (Subscription Rs. 150).

The following were elected a provisional Committee of the Federation :—

President—Sir Dinshaw M. Petit.

Members :—Messrs. G. D. Birla, Sir Purshottamdas Thakurdas, Vidyasagar Pandya, Jamal Mahomed, Lala Harkishen Lal, Adamji Haji Dawood, Jamshed N. R. Mehta, Vikramjit Singh, Shri Ram, W. C. Bannerjee, B. F. Madon, Kasturbhai Lalbhai, D. P. Khaitan and Rai Bahadur A. C. Bannerjee, the last two being appointed Treasurers.

The following are details of the principal Chambers of Commerce and kindred bodies in India at the present time :—

BENGAL.

The Bengal Chamber of Commerce was founded in 1834. Its headquarters are in Calcutta. Other societies connected with the trade and commerce of the city are the Royal Exchange, the Bengal Bonded Warehouse Association, the Calcutta Trades Association, the Bengal National Chamber of Commerce and the Marwari Chamber of Commerce. The Bengal Chamber is registered with a declaration of membership of 300. Its objects are the usual purposes connected with the protection of trade "in particular in Calcutta." There are two classes of members. Permanent (Chamber and Associated) and Honorary.

Merchants, bankers, shipowners, representatives of commercial, railway and insurance companies, brokers, persons and firms engaged in commerce, agriculture, mining or manufacture, and joint stock companies or other corporations, formed for any purpose or object connected with commerce, agriculture, mining or manufacture, and persons engaged in or connected with art, science or literature, may be elected as permanent members of the Chamber.

The following are the office bearers of the Chamber for the year 1927-28 :—

President.—The Hon'ble Sir George Godfrey (Messrs. Bird & Co.)

Vice-President.—Mr. J. H. Fyfe, M. L. C. (Messrs. Mackinnon, Mackenzie & Co.)

Committee.—Mr. A. Alker (Messrs. Shaw Wallace & Co.); Mr. G. L. Colvin, C.B., C.M.G., D.S.O. (E. I. Ry.); G. Cook (National Bank of India, Ltd.); T. W. Dowding, M.L.C. (Messrs. Turner Morrison & Co., Ltd.) ; Mr. B. E. G. Eddis (Messrs. Gillanders Arbuthnot & Co.); Mr. J. Reid Kay (Messrs. James Finlay & Co., Ltd.); Mr. R. A. Fowler (Messrs. McLeod & Co).,

The Secretary of the Chamber is Mr. D. K. Cunnison. Assistant Secretary, Mr. A. C. Daniel.

The following are the public bodies (among others) to which the Chamber has the right of returning representatives, and the representatives returned for the current year are :—

Council of State.—The Hon'ble Sir George Godfrey.

Bengal Legislative Council.—Mr. A. McD. Eddis (Messrs. Gladstone, Wylie & Co., Ltd.); Mr. C. C. Miller (Messrs. Hoare, Miller & Co. Ltd.); Mr. Geo. Morgan, C.I.E., (Messrs. Kilburn & Co.);Mr. P. Parrott (Messrs. Kilburn and Co.); Mr. J. H. Fyfe (Messrs. Mackinnon Mackenzie & Co.); Mr. O. S. Martin (Messrs. Martin & Co.)

Calcutta Port Commission.—Mr. J. H. Fyfe (Messrs. Mackinnon, Mackenzie & Co.); Mr.L. W. Dowding (Messrs. Turner, Morrison & Co. (Ld.); Mr. B. E. G. Eddis, (Messrs. Gillanders, Arbuthnot & Co.) ; Mr. J. Reid Key, (Messrs. Jas. Finlay & Co., Ltd.) ; Mr. A. McD. Eddis, M.L.C. (Messrs. Gladstone, Wyllie & Co.) & Mr. P. Parrott, M.L.C. (Messrs. Kilburn & Co.)

Calcutta Municipal Corporation.—Mr. J. Campbell Forrester, M.L.C. (Smith Forrester & Co.) ; Mr. Geo. Morgan, C.I.E., M.L.C. (Morgan, Walker & Co.); Mr. H. H. Hessling (Messrs. Steiners Ld.); H. C. N. Prance, (The Bengal Telephone Coy.,Ld.);Mr. Norman R. Luke, M.L.C. (Messrs. James Luke & Sons) & Mr. F. V. Rushforth (Messrs. Normans, Ross & Co.).

Chambers of Commerce.

Modern commerce in India was built up by merchants from the west and was for a long time entirely in their hands. Chambers of Commerce and numerous kindred Associations were formed by them for its protection and assistance. But Indians have in recent years, taken a large and growing part in this commercial life. The extent of their participation varies greatly in different parts of India, according to the natural proclivities and genius of different races. Bombay, for instance, has led the way in the industrial and commercial regeneration of the new India, while Bengal, very active in other fields of activity, lags behind in this one. Arising from these circumstances we find Chambers of Commerce in Bombay, Karachi, Calcutta, Madras and other important centres, with a membership both European and Indian; but alongside these have sprung up in recent years certain Associations, such as the Bombay Indian Merchants' Chamber and Bureau, of which the membership is exclusively Indian. These different classes of bodies are in no sense hostile to one another and constantly work in association.

The London Chamber of Commerce in 1921 realizing the increasing attention demanded by the economic development of India, took steps to form an "East India Section" of their organization. The Indian Chambers work harmoniously with this body, but are in no sense affiliated to it, nor is there at present any inclination on their part to enter into such close relationship, because it is generally felt that the Indian Chambers can themselves achieve their objects better and more effectively than a London body could do for them, and on various occasions the London Chamber, or the East India Section of it have shown themselves out of touch with what seemed locally to be immediate requirements in particular matters

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The Chamber elects representatives to various other bodies of less importance, such as the committee of the Calcutta Sailors' Home, and to numerous subsidiary associations. The following are the recognised associations of the Bengal Chamber of Commerce:—

Calcutta Wheat and Seed Trade Association, Indian Jute Mills Association, Indian Tea Association, Calcutta Tea Traders' Association, Calcutta Fire Insurance Association, Calcutta Import Trade Association, Calcutta Marine Insurance Agents' Association, The Wine, Spirit and Beer Association of India, Indian Mining Association, Calcutta Baled Jute Association, Indian Paper Makers' Association, Indian Engineering Association, Calcutta Jute Fabrics Shippers' Association, Calcutta Hydraulic Press Association, Jute Fabric Brokers, Association, Baled Jute Shippers' Association, Calcutta Jute Dealers' Association, Calcutta Hides and Skins Shippers' Association, Calcutta Sugar Importers' Association, Indian Lac Association for Research and Calcutta Accident Insurance Association, and Salt Importers' Association of Bengal.

The Chamber maintains a Tribunal of Arbitration for the determination, settlement and adjustment of disputes and differences relating to trade, business, manufactures, and to customs of trade, between parties, all or any of whom reside or carry on business personally or by agent or otherwise in Calcutta, or elsewhere in India or Burmah, by whomsoever of such parties the said disputes and differences be submitted. The Secretary of the Chamber acts as the Registrar of the Tribunal, which consists of such members or assistants to members as may, from time to time, annually or otherwise be selected by the Registrar and willing to serve on the Tribunal. The Registrar from time to time makes a list of such members and assistants.

The Chamber also maintains a Licenser Measurers Department controlled by a special committee. It includes a Superintendent (Mr. R. Ellis), Deputy Superintendent (Mr. A. H. Lugg), Head Office Manager (Mr. C. G. Smith) and six Assistant Superintendents (Messrs. J. G. Smyth) A. H. Mathews, G. C. G. Smyth and E. H. W. Wootten, J. B. F. Henfrey and B. Perry, and the staff at the time of the last official returns consisted of officers. The usual system of work for the benefit of the trade of the port is followed. The Department has its own provident fund and compassionate funds and Measurers' Club. The Chamber does not assist in the preparation of official statistical returns. It publishes weekly the *Calcutta Prices Current*, and also publishes a large number of statistical circulars of various descriptions in addition to a monthly abstract of proceedings and many other circulars on matters under discussion.

INDIAN CHAMBER OF COMMERCE, CALCUTTA.

The Indian Chamber of Commerce was established in November 1925, to promote and protect the trade, commerce and industries of India, and in particular the trade, commerce and industries in or with which Indians are engaged or concerned; to aid and stimulate the development of trade, commerce and industries in India with capital principally provided by or under the management of Indians; to watch over and protect the general commercial interests of India or any part thereof, and the interests of persons, in particular the Indians, engaged in trade, commerce or industries in India; to adjust controversies between members of this Chamber; to arbitrate in the settlement of disputes arising out of commercial transactions between parties willing or agreeing to abide by the judgment and decision of the Tribunal of the Chamber; to promote and advance commercial and technical education and such study of different branches of Art and Science as may tend to develop trade, commerce and industries in India; to provide, regulate and maintain a suitable building or room or suitable buildings or rooms for a Commercial Exchange in Calcutta; and to do all such other things as may be conducive to the development of trade, commerce and industries, or incidental to attainment of the above objects or any of them.

There are two classes of Members—Local and Mofussil. The Local Members pay an annual subscription of Rs. 100 and the Mofussil members Rs. 50. Merchants, Bankers, Shipowners, representatives of commercial, transport or insurance companies, brokers and persons engaged in commerce, agriculture, mining or manufacture, and persons engaged in or connected with art, science or literature who are Indians, shall be eligible for election as members of the Chamber.

The following constitute the Managing Committee of the Chamber for the year 1928:—President: Mr. Faizullabhai Gangjee; Senior Vice-President: Mr. Sheokissan Bhatter; Vice-President: Mr. A. L. Ojha, M.L.C.
Members: Mr. D. P. Khaitan, Mr. D. S. Erulkar, Mr. N. Rajabally, Mr. E. P. Guzdar, Mr. G. D. Birla, Mr. Kumar Krishna Kumar, Mr. Anandji Haridas, Mr. Raj Shekhar Bose, Mr. N. L. Puri, Mr. K. J. Purohit, Mr. A. D. Madgaonkar, Mr. Habib Mahomed, Mr. Sajjan Kumar Chowdhury, Mr. R. L. Nopany, Mr. C. S. Rangaswami, Secretary, Mr M. P. Gandhi, M.A., F.R.E.S., F.S.S.

The Indian Chamber of Commerce has also appointed a Tribunal of Arbitration to arbitrate in all disputes relating to various trades. With a view to cover the varying nature of disputes arising in different trades, separate panels of Arbitration are appointed on the Tribunal of Arbitration for each of the following trades:—(1) Jute, (2) Gunny, (3) Piece-goods and Yarn, (4) Iron and Steel, (5) Coal and Minerals, (6) General. Registrar of the Tribunal of Arbitration: Mr. P. M. Gandhi.

Chamber's Representative on the Calcutta Port Commissioners: Mr. D. S. Erulkar, B.A. (Cantab.), Bar-at-Law.

Chamber's Representative on the Bengal Nagpur Railway Advisory Committee: Mr. Anandji Haridas.

Chamber's Representatives on the Ry. Rates Advisory Committee: (1) Mr. D. S. Erulkar, B.A. (Cantab.), Bar-at-Law, (2) Mr. D. P. Khaitan, (3) Mr. E. P. Guzdar, (4) Mr. Faizullabhai Gangjee, (5) Mr. A. D. Addy.

Chamber's Representative on the Calcutta Society for the Prevention of Cruelty to Animals: Mr. E. P. Guzdar.

Chamber's Representatives on the Bengal Conciliation Panel: (1) Mr. D. P. Khaitan, (2) Mr. Anandji Haridas, (3) Mr. N. Rajabally.

BOMBAY.

The object and duties of the Bombay Chamber, as set forth in their Memorandum and Articles of Association, are to encourage a friendly feeling and unanimity among commercial men on all subjects involving their common good; to promote and protect the general mercantile interests of this Presidency; to collect and classify information on all matters of general commercial interest; to obtain the removal, as far as such a Society can, of all acknowledged grievances affecting merchants as a body, or mercantile interests in general: to receive and decide references on matters of usage and custom in dispute, recording such decisions for future guidance, and by this and such other means, as the Committee for the time being may think fit, assisting to form a code of practice for simplifying and facilitating business; to communicate with the public authorities, with similar Associations in other places and with individuals, on all subjects of general mercantile interests; and to arbitrate between parties willing to refer to, and abide by, the judgment of the Chamber.

The Bombay Chamber was established in 1836, under the auspices of Sir Robert Grant, who was then Governor of the Presidency, and the programme described above was embodied in their first set of rules. According to the latest returns, the number of Chamber members is 154 and the number of Associated members is 4. Of these numbers 19 represent banking institutions, 7 shipping agencies and companies, 3 firms of solicitors, 3 railway companies, 11 insurance companies, 16 engineers and contractors, 99 firms engaged in general mercantile business.

All persons engaged or interested in mercantile pursuits desirous of joining the Chamber and disposed to aid in carrying its objects into effect are eligible for election to membership by ballot. The Chamber member's subscription is Rs. 360 and the Associate member's subscription is Rs. 300 per annum. Gentlemen distinguished for public services, or "eminent in commerce and manufactures," may be elected honorary members and as such are exempt from paying subscriptions. Any stranger engaged or interested in mercantile pursuits and visiting the Presidency may be introduced as a visitor by any Member of the Chamber inserting his name in a book to be kept for the purpose, but a residence of two months shall subject him to the rule for the admission of members.

Officers of the Year.

The affairs and funds of the Chamber are managed by a committee of nine ordinary members, consisting of the President and Vice-President and seven members. The committee must, as a rule, meet at least once a week and the minutes of its proceedings are open to inspection by all members of the Chamber, subject to such regulations as the committee may make in regard to the matter. A general meeting of the Chamber must be held once a year and ten or more members may requisition, through the officers of the Chamber, a special meeting at any time, for specific purpose.

The Chamber elects representatives as follows to various public bodies:—

The Council of State, one representative.

Legislative Council of the Governor of Bombay, two representatives.

Bombay Municipal Corporation, one member, elected for three years.

Bombay Improvements Committee, one member, elected for two years.

Board of Trustees of the Port of Bombay, five members, elected for two years.

The following are the officers of the Chamber for the year 1929-30 and their representatives on the various public bodies:—

President.—G. L. Winterbotham, Esq., M.L.C.
Vice-President.—E. Miller, Esq., M.L.C.
Committee.—Sir Leslie Hudson, Kt.; P. Barker, Esq.; D. S. Burn, Esq.; C. C. Gulliland, Esq.; L. A. Halsall, Esq.; A. R. Ingram, Esq.; G. Z. Meli, Esq.
Secretary.—R. J. F. Sulivan, Esq.
Asst. Secretary.—H. Royal, Esq.
Representatives on—
Council of State: The Hon'ble Sir Arthur Froom, Kt.
Bombay Legislative Council: G. L. Winterbotham, Esq., and E. Miller, Esq.
Bombay Port Trust: Sir Leslie Hudson, Kt; G. L. Winterbotham, Esq., M.L.C.; F. C. Annesley, Esq.; E. Miller, Esq.; M.L.C.; P. Barker, Esq.
Bombay Improvement Committee: R. H. Parker, Esq.
Bombay Municipal Corporation: D. J. C. Wallace, Esq.
Sydenham College of Commerce & Economics: H. H. Sawyer, Esq. and A. G. Gray, Esq.
Railway Advisory Committees—
G. I. P.: F. C. Annesley, Esq.
B. B. & C. I.: E. C. Reid, Esq.
Bombay Smoke Nuisances Commission: B. Brown, Esq.
St. George's Hospital Advisory Committee: F. B. Thornely, Esq.
Indian Central Cotton Committee: T. G. Ralli, Esq.
Empire Cotton Growing Corporation: B. C. Reade, Esq.
Back Bay Reclamation Scheme—
Standing Advisory Committee: Sir Leslie Hudson, Kt.
Lay-out Committee: Sir Leslie Hudson Kt.

Bombay Development Department—Special Advisory Committee: A. M. Reith, Esq.
Auxiliary Force Advisory Committee: H. R. Watson, Esq.
Ex-Services Association: G. L. Winterbotham, Esq., M.L.C. (*Ex-officio*).
Federation of Chambers of Commerce of the British Empire: Sir Malcolm Hogg, Kt.
Bombay Telephone Company, Ltd.: G. L. Winterbotham, Esq., M.L.C.
Railway Rates Advisory Committee: F. G. Travers, Esq.; L. A. Halsall, Esq.; J. F. Macdonell, Esq; E. Miller, Esq, M.L.C.; G. Sugdury, Esq.
Government of Bombay Road Board: E. Miller, Esq., M.L.C.
Governor's Hospital Fund: C. N. Moberly, Esq., C.I.E.

Special Work.

One of the most important functions performed by the Chamber is that of arbitration in commercial disputes. Rules for this have been in existence for many years and have worked most satisfactorily. The decisions are in all cases given by competent arbitrators appointed by the General Committee of the Chamber and the system avoids the great expense of resort to the Law Courts.

A special department of the Bombay Chamber is its Statistical Department, which prepares a large amount of statistical returns connected with the trade of the port and of great importance to the conduct of commerce. The department consists of fourteen Indian clerks who, by the authority of Government, work in the Customs House and have every facility placed at their disposal by the Customs authorities. They compile all the statistical information in connection with the trade of the port, in both export and import divisions, which it is desirable to record. No other Chamber in India does similar work to the same extent.

The Bombay Chamber publishes a Daily Arrival Return which shows the receipts into Bombay of cotton, wheat and seeds, and a Daily Trade Return, which deals with trade by sea and shows in great detail imports of various kinds of merchandise and of treasure, while the same return contains particulars of the movements of merchant vessels.

The Chamber publishes twice a week detailed reports known as Import and Export manifests, which give particulars of the cargo carried by each steamer to and from Bombay.

Three statements are issued once a month. One shows the quantity of exports of cotton, seeds and wheat from the principal ports of the whole of India. The second gives in detail imports from Europe, more particularly in regard to grey cloths, bleached cloths, Turkey red and scarlet cloths, printed and dyed goods, fancy cloth of various descriptions, woollens, yarns, metals, kerosine oil, coal, aniline dyes, sugar, matches, wines and other sundry goods. The third statement is headed, "Movement of Piece-goods and Yarn by Rail," and shows the despatches of imported and local manufactured piece-goods and yarn from Bombay to other centres of trade served by the railways.

The "Weekly Return" issued by the Chamber shows clearances of a large number of important designations of merchandise. A return of "Current Quotations" is issued once a week, on the day of the departure of the English mail, and shows the rates of exchange for Bank and Mercantile Bills on England and Paris, and a large quantity of general banking and trade information.

The annual reports of the Chamber are substantial tomes in which the whole of the affairs of the Chamber and the trade of the port during the past year are reviewed.

The Chamber has also a Measurement Department with a staff of 18, whose business is that of actual measurement of exports in the docks before loading in steamers. Certificates are issued by these officers with the authority of the Chamber to shippers and ship agents as to the measurement of cotton and other goods in bales or packages. The measurers are in attendance on the quays whenever there are goods to be measured and during the busy season are on duty early and late. The certificates granted show the following details:—

(*a*) The date, hour and place of measurement:
(*b*) the name of the shipper;
(*c*) the name of the vessel;
(*d*) the port of destination;
(*e*) the number and description of packages;
(*f*) the marks;
(*g*) the measurement, and in the case of goods shipped by boats;
(*h*) the registered number of the boat;
(*i*) the name of the tindal.

Certificates of weight and of origin are also issued by the Chamber.

Associated Chambers of Commerce of India and Ceylon.

HEAD OFFICE LOCATED IN BOMBAY FOR 1929.

President: G. L. Winterbotham, Esq., M.L.C., President of the Bombay Chamber of Commerce.
Deputy President: Chairman for the time being of the Burma Chamber of Commerce, Rangoon.
Deputy, President: A. L. Carnegie, Esq., President, Upper India Chamber of Commerce, Cawnpore.
Secretary: R. J. F. Sulivan, Esq., Bombay Chamber of Commerce.

Bombay Millowners' Association.

The Bombay Millowners' Association was established in 1875 and its objects are as follows:—

(*a*) To encourage friendly feeling and unanimity amongst Millowners and users of steam water and/or electric power on all subjects connected with their common good.
(*b*) To secure good relations between members of the Association.
(*c*) To promote and protect the trade, commerce and manufactures of India in general and of the cotton trade in particular.
(*d*) To consider questions connected with the trade, commerce and manufactures of its members.
(*e*) To collect and circulate statistics and to collect, classify and circulate information relating to the trade, commerce and manufactures of its members.

Any individual partnership or company, owning one or more mill or mills or one or more press or presses or one or more ginning or other factory or factories actuated by steam, water, electric and/or other power is eligible for membership, members being elected by ballot. Every member is entitled to one vote for every complete sum of Rs. 50 paid by him as annual subscription.

The membership of the Association in 1928 numbered 89.

The following is the Committee for 1929 :—

H. P. Mody, Esq., (*Chairman*), Lalji Naranji Esq., M.L.C., (*Deputy Chairman*), Sir, Dinshaw M. Petit, Bart., Sir Vict r Sassoon, Bart., Sir Ness Wadia, K.B.E., C.I.E., The Hon'ble Sir Dinshaw E. Wacha, Kt., Sir Fazulbhoy Currimbhoy, Kt., C.B.E., Sir Joseph Kay, Kt., The Honb'ble Sir Munmohandas Ramji, Kt., A. Geddis, Esq., Jehangir B. Petit, Esq., M.L.C., the Hon'ble Mr. Ratansi D. Morarji, N. B. Saklatvala, Esq., C.I.E., S. D. Saklatvala, Esq., H. H. Sawyer, Esq., F. F. Stileman, Esq., F. Stones, Esq., O.B.E., Madhavji D. Thackersey, Esq., C. N. Wadia, Esq., C.I.E., and T. Watts, Esq., T. Maloney, Esq., (*Secretary*.)

The following are the Association's Representatives on public bodies :—

Bombay Legislative Council: Mr. J. B. Petit, M.L.C.

Legislative Assembly: Sir Victor Sasoon, Bart., M.L.A.

Bombay Port Trust: Mr. A. Geddis.

City of Bombay Improvement Trust: Mr H. P. Mody.

Victoria Jubilee Technical Institute: Mr. Jehangir B. Petit and Hon. Sir Manmohandas Ramji, Kt.

Bombay Smoke Nuisances Commission. Messrs. H, H. Lakin and W. A. Sutherland.

Advisory Board of Sydenham College of Commerce and Economics: Mr. S. D. Saklatvala.

Central Cotton Committee: Mr. S. D. Saklatvala.

Development of Bombay Advisory Committee: Mr. Jehangir B. Petit.

G. I. P. Railway Advisory Committee: Mr. A. Geddis.

B. B. & C. I. Railway Advisory Committee: Hon. Sir. Munmohandas Ramji, Kt.

Bombay Municipal Corporation: Mr. H. P. Mody.

University of Bombay:—Mr. Jehangir B. Petit.

Opium Enquiry Committee:—The Hon. Sir Munmohandas Ramji, Kt.

The Office of the Association is located in Sohrab House, Hornby Road, Fort, Bombay, and the telephone number is 25350.

Millowners' Mutual Insurance Association, Ltd.

The Millowners' Mutual Insurance Association, Ltd., was registered on 30th June 1924, as a Company limited by guarantee. The registered office of the Association is located in Sohrab House, Hornby Road, Bombay.

The objects of the Association are:—

(*a*) The mutual insurance of members of the Company against liability to pay compensation or damages to workmen employed by them or their dependents for injuries or accidents, fatal or otherwise, arising out of and in the course of their employment; (*b*) the insurance of members of the Company against loss or damage by or incidental to fire, lightning, etc.; and (*c*) to reinsure or in any way provide for or against the liability of the Company upon any assurances granted or entered into by the Company and generally to effect and obtain re-insurances, counter-insurances and counter-guarantees, etc., etc., etc.

The Association consisted of 56 members on 1st October, 1928.

All members of the Millowners' Association are eligible for admission to the Mutual Company, Non-members are also eligible for membership of the Mutual, provided their application is approved of by the Committee of the Millowners' Association.

The affairs of the Mutual Insurance Association are under the control of a Board of Directors.

The present Directors are :—

Sir Joseph Kay, Kt., (*Chairman*), Sir Victor Sassoon, Bart., M.L.A., Sir Ness Wadia, K.B.E., C.I.E., The Hon'ble Sir Munmohandas Ramji, Kt., The Hon'ble Mr. Ratansi D. Morarji, C. N. Wadia, Esq., C.I.E., A. Geddis, Esq., S.D. Saklatvala, Esq., G. M. Rose, Esq., and B. K. Mantri, Esq., B.A., Barister-at-Law, Secretary of the Association.

Indian Merchants' Chamber.

The Indian Merchants' Chamber was established in the year 1907. Its objects are:—

(*a*) To encourage friendly feeling and unanimity among business community on all subjects connected with the common good of Indian merchants.

(*b*) To secure organised action on all subjects relating to the interests of the Indian business community directly and indirectly.

(*c*) To promote the objects of the Indian business community in matters of inland and foreign trade, shipping and transport, industry and manufacture, banking and insurance.

(*d*) To collect and disseminate statistical and other information securing the promotion of the objects of the Chamber and to make efforts for the spread of commercial and economic knowledge.

(*e*) To take all steps which may-be necessary for promoting, supporting or opposing legislation or other action affecting the aforesaid interests by the Government or any Department thereof or by any local body or bodies and in general to take the initiative to secure the welfare of the business community in all respects.

(f) To make representations to Local, Central or Imperial authorities, Executive or Legislative on any matter affecting trade, commerce, manufacture or shipping, banking or insurance.

(g) To undertake by arbitration the settlement of commercial disputes between merchants and businessmen and also to provide for arbitration in respect of disputes arising in the course of trade, industry or transport, and to secure the services of expert technical and other men to that end if necessary or desirable.

(h) To advance and promote commercial and technical education and to found and support establishments and institutions for such purposes.

(i) To undertake special enquiries and action for securing redress for legitimate grievances of any branch of trade or industry as also all such other actions as may be conducive to the extension of trade, commerce or manufactures, or incidental to the attainment of the above objects.

(j) To secure the interests and well-being of the Indian business communities abroad.

(k) And generally to do all that may be necessary in the interests of the realisation of the above objects of the Chamber directly or indirectly.

There are three classes of members:—

(1) Ordinary, (2) Patrons and (3) Honorary

(1) There are three classes of ordinary members:—

(a)—Residents of Bombay and its suburbs who will have to pay Rs. 75 as annual subscription; but joint stock Companies will have to pay Rs. 100 per year.

(b)—Mofussil members who will have to pay Rs. 25 as annual subscription.

(c)—Associations which will have to pay Rs. 125 as annual subscription.

Admission Fee:—All the ordinary members and patrons pay Rs. 100 as admission fee which is credited to a capital fund of the Chamber and not expended on revenue account except with the consent of the general body.

(2) Patrons:—Indian firms or individual Indian merchants can join as Patrons Firms will have to pay Rs. 5,000 and individuals Rs. 2,500 as donation, the proceeds of which will be credited to a capital fund which shall not be expended on revenue account but the interest whereof shall be taken to revenue account.

(3) Honorary members:—Gentlemen distinguished for public services or eminent in commerce and manufactures or otherwise interested in the aims and objects of the Chamber may be elected as Honorary members by a General Meeting of the Chamber on the recommendation of the Committee and as such shall be exempted from paying subscriptions. They shall not be entitled to vote at any meeting of the Chamber nor shall they be eligible to serve on the Committee.

Any Indian gentleman, firm or association engaged in mercantile pursuits or interested in trade and commerce desirous of joining the Chamber shall be eligible for membership.

The following bodies are connected directly and indirectly with the Chamber:—

The Grain Merchants' Association (which is a member).

The Hindustani Native Merchants' Association (which is a member).

The Bombay Rice Merchants' Association.
The Bombay Yarn, Copper and Brass Native Merchants' Association.

The Bombay Shroff Association.
The Bombay Diamond Merchants' Association.
The Bombay Pearl Merchants' and Jewellers' Association.
The Bombay Bullion Exchange, Ltd.
The Bombay Paper and Stationery Merchants' Association.

The Japan and Shanghai Silk Merchants Association, Bombay.

The Sugar Merchants' Association.
The Maharashtra Chamber of Commerce Bombay.

The Bombay Grain Dealers' Association Bombay.

The Bombay Glass Bangles Merchants' Association, Bombay.

Under the Montagu-Chelmsford Reforms, the Chamber has the right of electing one representative on the Indian Legislative Assembly and one on the Bombay Legislative Council. The Chamber also has the right to elect five representatives on the Bombay Port Trust, one representative on the Bombay Municipal Corporation, and one representative on the Improvement Committee.

The following are the Office-bearers of the Indian Merchants' Chamber for the year 1929:—

Mr. Lakhmidas Rowjee Tairsee (*President*.)
Mr. Husseinbhoy A. Lalji, M.L.C., (*Vice President*).
Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., M.L.A.
Mr. Lalji Naranji, M.L.C.
Hon'ble Sir Phiroze, C. Stethna, Kt., O.B.E.
Professor Sohrab R. Davar, Bar-at-Law.
Mr. B. F. Madon.
Mr. Vithaldas Damodar Govindji.
Mr. Sarabhai N. Haji, M.L.A.
Mr. Walchand Hirachand, C.I.E.
Mr. H. P. Mody.
Sir Shapurji B. Billimoria, Kt., M.B.E.
Mr. Devidas Mahhowji Thakersey.
Mr. Ishwardas Lakhmidas.
Professor Khushal T. Shah.
Mr. R. Masani.
Mr. Dwarkadas Chhotalal Carsondas Mulji Vakil.
Mr. Manharlal Vrajdas Merchant.
Rao Saheb Harjivan Valji.

Mr. Jehangir Bomanji Petit, M.L.C.
Mr. N. M. Muzumdar.
Mr. Dhirajlal C. Modi.
Mr. Fazal Ibrahim Rahimtoola, M.L.A.
Hon'ble Mr. Ratansi Dharamsi Morarji.
Mr. Ebrahim G. Currimbhoy.
Ex-Officio Members:—
Sir Chunilal V. Mehta, K.C.S.I.
Sir Ibrahim Rahimtoola, K.C.S.I.
Mr. Kaikobad Cowasji Dinshaw.
Japan & Shanghai Silk Merchants' Association (Mr. B. N. Karanjia).
Bombay Bullion Exchange, Ltd., (Mr. C. B. Mehta).
The Seeds Traders' Association (Mr. Ratilal M. Gandhi).
Bombay Shroff Association (Mr. Hirachand V. Desai.)
The Sugar Merchants' Association (Mr. Jeevanjee Currimjee.)
Co-opted Members:—
Mr. Velji Lakshamsi Nappoo.
Mr. Vithaldas Kanji.
Mr. Kapilram H. Vakil.
Mr. Manu Subedar.
Mr. M. A. Master.

The following are the Chamber's representatives on various public bodies:—

Indian Legislative Assembly: Sir Purshotamdas Thakurdas Kt., C.I.E., M.B.E., M.L.A.
Bombay Legislative Council: Mr. Lalji Naranji, M.L.C.

Chamber's Representatives on the Board of Trustees of the Bombay Port: Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., M.L.A., Mr. Lalji Naranji, M.L.C. Mr. Lakhmidas Raowji Tairsee, Mr. Devidas Madhowji Thakersey, Mr. Velji Lakhamsi Nappoo.

Chamber's Representative on the Bombay Municipal Corporation: Mr. Vithaldas Kanji.
Representative on the Bombay Improvement Trust: Mr. Manu Subedar.
Chamber's Representative on the Advisory Committee of the Bombay Development Department: Mr. Manu Subedar.
Chamber's Representative on the Indian Central Cotton Committee: Sir Purshotamdas Thakurdas Kt., C.I.E., M.B.E., M.L.A.

Chamber's Representative on the Senate of the Bombay University: Mr. K. H. Vakil.
Secretary: Mr. J. K. Mehta, M.A.
Assit. Secretary: Mr. A. H. Maru, B. Sc., (Econ). (Nat.)
Chamber's Solicitors: Messrs. Captain and Vaidya, Esplanade Road, Fort Bombay.

The Chamber's Anglo-Gujarati Quarterly Journal is published in Bombay July, October, January and April.

Bombay Native Piece-Goods Merchants' Association.

The objects of the Association are as follows:—

(*a*) To promote by creating friendly feelings and unity amongst the Merchants, the business of the piece-goods trade in general at Bombay, and to protect the interest thereof: (*b*) to remove as far as it will be within the powers of the Association to do so, all the trade difficulties of the piece-goods business and to frame such line of conduct as will facilitate the trade; (*c*) to collect and assort statistics relating to piece-goods and to correspond with public bodies on matters affecting trade, and which may be deemed advisable for the protection and advancement of objects of the Association or any of them; and (*d*) to hear and decide disputes that may be referred to for arbitration.

The following are the office-bearers for the current year:—

Chairman—Hon'ble Sir Manmohandas Ramji, Kt. J.P.

Deputy Chairman.—Mr. Devidas Madhavji Thakersey, J.P.

Hon. Joint Secretaries.—Messrs. Goculdas Jivraj Dayal and Rao Sahib Hurjiwan Walji, J.P.

Hon. Treasurer.—Mr. Jethabhai Kalianji.

Grain Merchants' Association.

The object of this body is 'to promote the interests of the merchants and to put the grain and oil-seeds trade on a sound footing." It is an influential body of large membership. The office holders for the current year are as follows:—

Chairman.—Mr. Velji Lakhamsi, B.A., LL.B.

Vice-Chairman.—Mr. Purshotam Hirji.

Hony. Secretary.—Mr. Nathoo Cooverji.

Secretary.—Mr. Uttamram Ambaram, B.A., LL.B.

The address of the Association is 262, Masjid Bunder Road, Mandvi Post, Bombay.

MAHARASHTRA CHAMBER OF COMMERCE.

The Maharashtra Chamber of Commerce was started in September 1927 with the object of establishing friendly relations among merchants and factory-owners of Maharashtra, safeguarding their interests against measures likely to affect them adversely, collecting financial, industrial and trade statistics, and disseminating information thereabout amongst members of the Chamber.

Membership of the Chamber is confined to merchants and factory-owners belonging to the City of Bombay, Bombay Suburban District Poona, Sholapur, Satara, Ratnagiri, Kolaba, Nasik, Ahmednagar, Thana and East and West Khandesh and Belgaum and Indian States adjoining these districts.

President: Sheth Walchand Hirachand C.I.E., J.P.

Vice-Presidents: R. B. Hanmantram Ramnath and M. L. Dahanukar. *Hon. Secretary*: G. S. Ranade.

The offices of the Chamber are in the Phoenix Building, Graham Road, Ballard Estate, Bombay.

KARACHI.

The objects and duties of the Karachi Chamber of Commerce are set forth in terms similar to those of Bombay. Qualifications for membership are also similar. Honorary Membership may be conferred upon "any gentlemen interested in the affairs and objects of the Chamber" subject to election by the majority of votes of members. All new members joining the Chamber pay Rs. 500 entrance fee and the monthly subscription is Rs. 18. The subscription to the Chamber's periodical returns is at present fixed at Rs. 5 per month. The affairs of the Chamber are managed by a committee of ten members, consisting of a Chairman, Vice-Chairman and eight members, elected at the annual meeting of the Chamber as early in the year as possible. The Chamber elects a representative on the Bombay Legislative Council, three representatives on the Karachi Port Trust and two on the Karachi Municipality. There were last year 75 members of the Chamber. The following are the officers for the current year:—

Chairman—Mr. F. Clayton, C.I.E., M.L.C. (Fleming, Shaw & Co.).

Vice-Chairman.—R. D. England, Esq. (Messrs. Grahams Trading Co., Ltd.).

Committee.—Messrs. R. S. Backhouse (David Sassoon & Co., Ltd.), J. R. Baxter (Mackinnon Mackenzie & Co.), P. Crawford (Shaw, Wallace & Co.,), J. Morf (Volkart Bros.), W. M. Petrie (Ralli Brothers), A. G. Rice (Chartered Bank of India, Australia and China), A. I. Sleigh (North-Western Railway) and H. C. Whitehouse (Strauss & Co., Ltd.)

Representatives on the Bombay Legislative Council.—Mr. F. Clayton, M.L.C.

Representatives on the Karachi Port Trust.—Mr. F. Clayton, M.L.C., Mr. E. A. Pearson & Mr. J. R. Baxter.

Representatives on the Karachi Municipality.—Mr. F. R. Hawkes, O.B.E. & Mr. E. G. H. Mewburn.

Secretary.—Major Alan Duguid, A.F.C., late R.A.F.

Public Measurer.—Major Alan Duguid (Ag.)

The following are the principal ways in which the Chamber gives a special assistance to members. The Committee take into consideration and give an opinion upon questions submitted by members regarding the custom of the trade or of the Port of Karachi. The Committee undertake to nominate European surveyors for the settlements of disputes "as to the quality or condition of merchandise in which both parties desire the Chamber to do so." When two members of the Chamber or when one member and a party who is not a member have agreed to refer disputes to the arbitration of the Chamber or of an arbitrator or arbitrators nominated by the Chamber, the Committee will undertake to nominate an arbitrator or arbitrators, under certain regulations. Similarly, the Chamber under certain regulations, will undertake to appoint an arbitrator or arbitrators for the settlement of disputes in which neither of the parties are members of the Chamber. A public measurer is appointed under the authority of the Chamber to measure pressed bales of cotton, wool, hides and other merchandise arriving at or leaving the port.

MADRAS.

The Madras Chamber of Commerce was founded in 1836. All merchants and other persons engaged or interested in the general trade, commerce and manufactures of Madras are eligible for membership. Any assistant signing a firm or signing *per-pro* for a firm is eligible. Members who are absent from Madras but pay their subcriptions may be represented in the Chamber by their powers-of-attorney, as honorary members, subject to ballot Honorary members thus elected are entitled to the full privilege of ordinary members. Election for membership as by ballot at a general meeting, a majority of two-thirds of the recorded votes being necessary to secure election. Every member pays an entrance fee of Rs. 100, provided that banks, corporate bodies and mercantile firms may be represented on the Chamber by one or more members and are liable for an entrance fee of Rs. 100 once in ten years each. The subscriptions shall not exceed Rs. 300 per annum, payable quarterly in advance, subject to reduction from time to time in accordance with the state of the Chambers' finances. Absentees in Europe pay no subscription and members temporarily absent from Madras pay one rupee per month. Honorary members are admissible to the Chamber on the usual conditions. Members becoming insolvent cease to be members but are eligible for re-election without repayment of the entrance donation.

The Chamber undertakes arbitrations and surveys, the granting of certificates of origin and the registration of trade marks. One of the rules for the last named is "that no trade mark or ticket shall be registered on behalf of an Indian firm trading under a European name."

The following publications are issued by the Chamber :—Madras Price Current and Market Report, Tonnage Schedule and Madras Landing Charges and Harbour Dues Schedule.

There are 56 members and 6 Honorary Members of the Chamber in the current year and the Officers and Committee for the year are as follows :—

Chairman : Mr. K. Kay, M.L.C.

Vice-Chairman. Sir James Simpson, M.L.C.

Committee : Mr. F. Birley, Mr. W. M. Browning, Mr. W. H. H. Grahame, Mr. F. B. Wathen, Mr. W. O. Wright, M.L.C.

The following are bodies to which the Chamber are entitled to elect representatives and the representatives elected for the year:—

Madras Legislative Council: Mr. K. Kay & Sir James Simpson.

Madras Port Trust: Mr. K. Kay, Sir James Simpson, Mr. F. Birley & Mr. W. O. Wright.

Corporation of Madras: Mr. A. J. Powell, Mr. D. M. Reid & Mr. A. S. Rose.

Federation of Chambers of Commerce of the British Empire: Sir Gordon Fraser, Kt.

Secretary: Lt. Col. C. H. Brock, O.B.E., V.D.

SOUTHERN INDIA.

The Southern India Chamber of Commerce has its Registered Office in Madras. The objects of the Chamber are those usual for such bodies, concerning the promotion of trade, especially in the Madras Presidency, and the interests of members. Special objects are stated to be:—

"To maintain a Library of books and publications of commercial interest, so as to diffuse commercial information and knowledge amongst its members.

"To establish Museums of commercial products or organise exhibitions, either on behalf of the Chamber or in co-operation with others"

There are two classes of members, permanent and honorary. The usual condition as to eligibility for election prevail.

The right of electing two representatives to the Madras Port Trust was accorded to the Chamber by the Madras Port Trust Amendment Act, 1915. Members of the Chamber hold seats in the Madras Legislative Council and the Chamber has also been accorded the right of electing a representative to that body. Under the Madras City Municipal Act, 1919, the Chamber has the right of electing two Councillors to the Madras Corporation. Under the State Aid to Industries Act 1923 the Chamber has the right to elect one member to the Board of Industries.

The Chamber also sends its representatives to the Road Board, the Town Planning Trust the Provincial Cotton Committee, Auditors Approval Committee, Vizagapatam Harbour Works Committee, the Advisory Committees of the South Indian and Madras and Southern Mahratta Railways, the Madras University and the Government Institute of Commerce Advisory Council, Madras.

The Chamber has 230 members on the roll and has its own building.

President.—Sir M. Ct. Muthia Chetty.

Vice-Presidents.—Dewan Bahadur Govindas Chathoorbhujadas and Mr. C. Abdul Hakim Sahib Bahadur.

Honorary Secretaries.—Yusuff Sait & V. C. Rangaswamy.

Assistant Secretary.—P. R. Nair, B.A., B Com.

NORTHERN INDIA.

The Northern India Chamber of Commerce, Lahore, was inaugurated in November 1923, to watch over the mercantile interests of the hitherto practically unrepresented area of Northern India and the N. W. F. Province.

The main aims and objects of the Chamber are to promote and protect commerce and industries, to obtain the redress of any grievances and hardships under which the general mercantile community suffer, and to establish just and equitable principles of trading, etc. Among its other activities, the Chamber undertakes the conduct of surveys and arbitrations, the registration of trade marks, etc.

Members are elected by ballot, the entrance fee and annual subscription for firms in Lahore being Rs. 100 and Rs. 200 respectively.

The following are the Officers, Committee, etc., for the year from April 1927 :—

Chairman: Mr. W. R. Macpherson.

Vice-Chairman: Mr. D. J. Horn.

Committee: Messrs. D. May Arrindell, M.C., Rai Bahadur L. Dhanpat Rai, M.L.C., P. H. Guest, C. F. Laborde, J. McIntosh, Owen Roberts, M.L.C., Raja Ram, W. Roberts, Hon'ble Rai Bahadur L. Ram Saran Das, C.I.E., M.C.S., H. J. Rustomji, D. W. Teasedale, D. B. Trevor, O.B.E.

Secretary: Mr. H. J. Martin.

Office: C. & M. Gazette Buildings, The Mall, Lahore.

UPPER INDIA.

The Upper India Chamber of Commerce is concerned with trade, commerce and manufactures in the United Provinces and has its registered office at Cawnpore. Members are elected by the Committee, subject to confirmation by the next general meeting of the Chamber. Gentlemen distinguished for public service, or eminent in commerce or manufactures, may be elected honorary members of the Chamber by the members in a General Meeting and such shall be exempted from paying any subscription to the Chamber. There is no entrance fee for membership, but subscriptions are payable as follows:—A firm, company or association having its place of business in Cawnpore, Rs. 300 a year; an individual member, resident or carrying on business in Cawnpore, Rs. 300; firms or individuals having their places of business or residence outside Cawnpore pay half the above rates, but the maintenance of a branch office in Cawnpore necessitates payment of full rates.

The affairs and funds of the Chamber are managed by a Committee of ten members, which has power to constitute Local Committees of from four to seven members each, at trade centres where membership is

sufficiently numerous to justify the step. Such Local Committees have power to communicate only with the Central Committee.

The Chamber appoints arbitration Tribunals for the settlement and adjustment of disputes when invited, to do so, members of the Tribunals being selected from a regular printed list of arbitrators.

The Chamber has in the present year 67 members, one honorary member and six affiliated members.

The following are the officers:—

Upper India Chamber of Commerce Committee:—*President*—Mr. A. L. Carnegie (The British India Corporation Limited); *Vice-President.*—Mr. J. M. Lownie (Messrs. Begg, Sutherland & Co., Ltd.); *Members*—Mr. G. M. Hunter Thoms (The Muir Mills Company, Limited); Mr. T. Gavin Jones, M. L. A. (Messrs. D. Waldie & Company, Limited); Mr. W. R. Watt, M.A. (Cawnpore); Mr. Menzies, O.B.E. (The British India Corporation, Limited); Babu Ram Narain (Cawnpore); Mr. H. Horsman, M.C. (The Swadeshi Cotton Mills Co., Ltd.); Mr. J. B. Gray, (The National Bank of India, Ltd.); Mr. U. C. Sandys (East Indian Railway); Representatives on the United Provinces Legislative Council—Mr. E. M. Souter, M.L.C. (Messrs. Ford & Macdonald, Ltd.) & Mr. J. P. Srivastava, M.Sc., M.L.C., Cawnpore.)

Secretary.—Mr. J. G. Ryan, M.B.E.

Head Clerk.—Babu B. N. Ghosal.

PUNJAB.

The Punjab Chamber of Commerce has its headquarters at Delhi and exists for the care of mercantile interests on the usual lines in the Punjab, the North West Frontier Province and Kashmir. The Chamber has Branches at Amritsar and Lahore. Membership is by ballot and is restricted to Banks, Merchants (wholesale), Railways and proprietors of large industrial interests. The entrance fee is Rs. 100 and the rate of subscription Rs. 180 per year. The Chamber returns one member to a seat on the Reformed Punjab Legislative Council jointly with the Punjab Trades Association, and shares representation in the Indian Legislative Assembly with other Chambers which are members of the Associated Chambers of Commerce of India and Ceylon, in the seat allotted to the Associated Chambers. The Chamber is a member of the Federation of Chambers of Commerce, London. The Chamber is represented on the Municipal Corporation of Delhi as well as on the East Indian Railway Advisory Committee, Cawnpore the Cotton Excise Duties Advisory Committee, Bombay; and the Auxiliary Forces Committees, Delhi & Lahore Military Areas.

The Managing Committee meets alternately at Delhi and Lahore and the following are office bearers:—

Chairman: Mr. P. Mukerjee; *Deputy Chairman:* Mr. D. G. W. Teasdale, *Members*: Mr. V. F. Gray, M.L.C. (Messrs. R. J. Wood & Co., Delhi); Mr. R. E. Grant-Govan (Messrs. Govan Brothers, Ltd., Delhi); Mr. H. A. Steerwood (Lloyd's Bank, Limited, Delhi); Mr. Shri Ram (Delhi Cloth & General Mills Co., Ltd., Delhi); Sardar Saheb Sardar Sobha Singh (Khalsa Spinning and Weaving Mills, Delhi); Mr. K. C. Roy, C.I.E., M.L.A. (The Eastern News Agency., Ltd., Delhi) Mr. J. C. F. Davidson (Messrs. Bird & Co., Delhi); Mr. D. B. Trevor, O.B.E. (North Western Railway, Lahore); Sardar Mohan Singh Rais, Rawalpindi; The Hon'ble R. B. Lala Ramsaran Dass, C.I.E., M.L.A. (The Melaram Cotton Mills, Lahore); Mr. Lachhmi Narain (Messrs. I. D. Lachmi Narain, Amritsar); Mr. Moti Ram Mehra (Messrs. Moti Ram Mehra & Co., Amritsar); Mr. A. C. Mullen (The Amritsar Distillery Co., Ltd., Amritsar); Mr. Robertson Taylor (The East India Carpet Co., Ltd., Amritsar).

Secretaries.—Messrs. A. F. Ferguson & Co. Chartered Accountants, Delhi.

UNITED PROVINCES.

The number of members on register is 126 (97 Local and 29 Mofussil). All the important commercial and industrial interest of the Provinces of Agra and Oudh are represented.—

President:—Mr. W. C. De'Noronha, Proprietor of Messrs. M. X. De'Noronha & Son, Cawnpore.

Vice-Presidents:—Babu Sri Ram Khanna. (Managing Director of Messrs. Ramchand Gurshai Mal Cotton Mills Co., Ltd., Lucknow), Lala Ram Kumar Newatia of Messrs. Ram Kumar Rameshwar Das, Cawnpore.

Secretary:—Rai Bahadur Babu Vikramajit Singh, Advocate, M. L. C., Director of British India Corporation, Ltd., Cawnpore.

Joint-Secretary:—Babu Gur Prasad Kapoor of Messrs. Basti Ram Mata Din, Cawnpore.

Members of the Committee:—Lala Rameshwar Prasad Bagla; Lala Salig Ram; Mr. I. D. Varshanie; Lala Mahadeo Prasad; Lala Basdeo Dalmia; Rai Sahib Lala Gopi Nath; Babu Dwarka Prasad Singh; Mr. Hira Lal Khanna; Mr. Chaman Lal Mehta; Mr. Misri Lal; Mr. Krishna Lal Gupta; Lala Nand Ram Mehrotra; Lala Padam Pat Singhania; Babu Behari Lal; Lala Shyam Lal. M. A.; Mr. B. T. Thakur.

BURMA.

The Burma Chamber of Commerce, with headquarters at Rangoon, exists to encourage friendly feeling and unanimity among commercial men on all subjects involving their common good, to promote and protect trade, commerce and manufactures and, in particular, the general mercantile interests of the province, to communicate with public authorities, associations and individuals on all matters, directly or indirectly affecting these interests, and to provide for arbitration between parties willing to refer to, and abide by, the judgment of arbitrators appointed by the Chamber. The following are affiliated bodies:—

Burma Fire Insurance Association.

Burma Marine Insurance Agents' Association.

Rangoon Import Association.

Burma Motor Insurance Agents' Association.

The Chamber elects representatives to the following Public Bodies:—

Council of State.

Burma Legislative Council.

Rangoon Port Trust Board.

Rangoon Corporation.

Victoria Memorial Park Trustees.

Pasteur Institute Committee.

Burma University Council.

Rangoon Development Trust.

Police Advisory Board.

Rangoon European Stipend Board.

Accountancy Classes Advisory Board, Rangoon.

Advisory Committee Constituted under the Auxiliary Force Act, 1920.

Rangoon General Hospital Advisory Committee.

Local Railway Advisory Council.

Rangoon Water Supply Committee.

Bigandant Home for Incurables.

All British corporations, companies, firms or persons engaged or interested in mercantile pursuits, such as merchants, bankers, shipowners and brokers or who are connected with agriculture, mining, manufactures, insurance, railways, commerce, art, science or literature shall be eligible to become Chamber Members. Every non-British concern or person, similarly engaged or interested as indicated above, other than a subject of a State with which the British Empire was at War on September 19th, 1918, shall be eligible for election as an Associate Member. The annual subscription of each Chamber Member shall be Rs. 480 per annum and of each Associate Member Rs. 360 per annum. An entrance fee of Rs. 150 is payable by each new Member. Officials and others indirectly connected with the trade of the province or who may have rendered distinguished service to the interests represented by the Chamber may be elected by the Committee either on their own motion or on the suggestion of two Members as Honorary Members of the Chamber. Honorary Members are not required to subscribe to the funds of the Chamber.

The Chamber undertakes arbitrations in addition to its ordinary work. It does not publish any statistical returns.

Secretary.—B. P. Cristall, Esq.

Representative on the Council of State.—Hon'ble Mr. K. B. Harper.

Representatives on the Burma Legislative Council.—M. Joakin, Esq., M.L.C. and F. H. Wroughton, Esq., M.L.C.

Representatives on the Rangoon Port Trust Board.—M. L. Burnet, Esq., J. R. Turner, Esq., W. T. Howison, Esq., and C. G. Wodehouse, Esq.

Representative on the Rangoon Corporation—A. P. Baxter, Esq.

Victoria Memorial Park Trustee.—J. R. D. Glascott, Esq., C.I.E., M.L.C.

Pasteur Institute Committee.—J. R. D. Glascott, Esq., C.I.E., M.L.C.

Burma University Council.—H. Smiles, Esq., M.A.

Rangoon General Hospital Advisory Committee—D. A. Dalziel, Esq.

Police Advisory Board—A. P. Baxter, Esq.

Rangoon Development Trust.—T. Cormack, Esq., M.L.C.

Bigandant Home for Incurables.—W. T. Howison, Esq., M.L.C.

Accountancy Classes Advisory Board.—Mr. L. Baird.

Local Railway Advisory Council.—M. L. Burnet, Esq.

Rangoon Water Supply Committee.—W. T. Howison, Esq., J. R. Baird-Smith, Esq., and T. Reive, Esq.

Advisory Committee constituted under the Auxiliary Force Act, 1920.—L. T. Morshead, Esq.

COCANADA.

The Cocanada Chamber of Commerce was established on 29th October, 1868.

The following are the members of the Chamber which has its head-quarters at Cocanada, the chief port on the Coromandel Coast. north of Madras:—

Messrs. The Coromandel Co., Ltd.; Ripley & Co.; Volkart Bros.; Innes & Co.; Wilson & Co.; Gordon Woodroffe & Co. (Madras), Ltd.; J. H. Vavasseur & Co., Ltd.; Burmah-Shell Oil Storage & Distributing Co., of India, Ltd., Northern Circars Development Co., The Bombay Co., Ltd., The Agent, Imperial Bank of India.

MEMBERS OF THE COMMITTEE.

Mr. R. F. Stevenson (*Chairman*)
,, H. W. G. Colley.
,, A. Graham.
Mr. G. Gompertz (*Secretary*).

The rules of the Chamber provide that by the term 'member' be understood a mercantile firm or establishment, or the permanent Agency of a mercantile firm or establishment, or a society of merchants carrying on business in Coconada or other place in the Districts of Kistna, Godavari, Vizagapatam, and Ganjam, and duly elected according to the Rules of the Chamber, and that all such be eligible. but only members resident in Cocanada can hold office. Members are elected by ballot. The Committee, when called upon by disputing members or non-members of the Chamber, give their decision upon all questions of mercantile usage and arbitrate upon any commercial matter referred to them for final judgment. In either case a minimum fee of Rs. 16 must accompany the reference with Rs. 5 from a nonmember and Re. 1 from a member as payment for the Chamber's Sealed Certificate.

The Committee consisting of 3 members, including the Chairman, is elected by ballot at the general meeting in January in each year for a term of 12 months. The entrance fee for each member, whose place of business is in Cocanada, is Rs. 100 and for each member whose place of business is elsewhere is Rs. 50. The subscription for each member whose place of business is in Cocanada is Rs. 120 per annum payable quarterly and for each member whose place of business is elsewhere is Rs. 60 per annum, payable in advance. Committee meetings are held on the 1st Tuesday in the month and general meetings on the 3rd Tuesday or when ordered.

A Fortnightly Circular of current rates of produce, freights, and exchange is drawn up by the Committee.

CEYLON.

The Ceylon Chamber of Commerce was established on the 25th March 1839 and was incorporated in 1895, with its headquarters at Colombo. All firms and persons engaged in the general trade of Ceylon are admissible as members and every person or firm desirous of joining the Chamber must after having furnished one month's notice of their intention to apply for membership be proposed by one member, seconded by another and balloted for by the whole Chamber. The affairs of the Chamber are conducted by a Board of Directors consisting of Chairman and Vice-Chairman and 10 members.

The following is the membership of the Board at the present time:—

Mr. S. P. Hayley, (*Chairman*), Mr. C. H. Figg (*Vice-Chairman*), Mr. George Brown, Mr. C. S. Burns. Mr. J. M. Caldwell, Mr. R. W. Fowke, Mr. H. G. P. Maddocks, Mr. C. A. Pearcy, Mr. A. D. Skrine, Mr. G. G. Smith, and Mr. J. A. Tarbat.

Secretary.—Mr. C. F. Whitaker.

Representative in the Legislative Council.—Hon'ble Mr. M. J. Cary.

DEPARTMENT OF COMMERCIAL INTELLIGENCE AND STATISTICS.

The Department of Statistics was reabsorbed into the Department of Commercial Intelligence with effect from the 1st December 1922. The joint department has its office at No. 1, Council House Street, Calcutta, the headquarters of the Director-General. It embraces two distinct classes of work: (*a*) the collection and dissemination of information connected with overseas trade which may be of use to Indian firms, and (*b*) the compilation and publication of All-India statistics. Among the important publications for which the Director-General is responsible are the following annual volumes: Review of the Trade of India, Statement of the Foreign Sea-borne Trade and Navigation of British India, Statistical Abstract for British India, Agricultural Statistics, Estimates of Area and Yield of Principal Crops and Indian Customs Tariff. The department

also publishes a weekly journal—"The Indian Trade Journal"—the principal features of which are (a) information as to tariff changes in foreign countries which affect Indian interests, (b) notices of tenders called for and contracts placed by Government departments and public bodies, (c) crop reports and forecasts, (d) Government orders, communiques and other notifications affecting trade, (e) analysis of Indian trade statistics, (f) market reports, prices and trade movements of the staple exports and imports, (g) trade enquiries for securing trade Introductions, (h) summaries of the leading features of consular and other trade reports, and (i) abstracts of the proceedings of the various Chambers of Commerce in India.

The Department also administers the COMMERCIAL LIBRARY AND READING ROOM located at No. 1, Council House Street, Calcutta. This was at first a small departmental br ary used for the purpose of answering enquiries, but in 1919 the Government of India agreed to the formation of a combined technological library of reference in Calcutta in place of the separate libraries attached to the Departments of Commercial Intelligence, Statistics, and Patents and Designs, and the resultant Commercial Library and Reading Room was placed under the administrative control of the Director-General. It has now been expanded into a first-class technical library containing over 11,100 volumes as well as Indian and foreign statistical publications, and over 400 technical and commercial journals and market reports. Ordinarily books are consulted in the Library, but they are also available on loan upon deposit of value throughout India.

The Department works in close co-operation with Directors of Industries and other Government Departments in India, with the Indian Trade Commissioner in London, with His Majesty's Trade Commissioners in India and the Dominions, and with Consular Officers in various parts of the world. And the yearly increase in its correspondence shows that it is steadily being used more and more both by firms in India and by overseas firms interested in Indian exports.

THE BRITISH TRADE COMMISSIONER SERVICE IN INDIA.

The British Trade Commissioners in India are part of the world-wide Commercial Intelligence Organisation of the Imperial Government. The Department of Overseas Trade, London, which is the headquarters of this organisation, is a joint department of the Board of Trade and the Foreign Office and was created in 1917 with the specific object of stimulating the overseas trade of the United Kingdom by securing commercial information from all parts of the world; by disseminating it to British manufacturers and exporters; by undertaking such special constructive activities as may be found possible; and by assisting traders in the removal of their difficulties. The Department has nothing to do with the regulation of trade. It passes no measures and makes no restrictive or regulative orders. Briefly, the policy on which it is based is the policy of assistance without interference.

The Department of Overseas Trade maintains a network of trained and experienced Commercial Intelligence Officers throughout the world; who forward a constant supply of commercial information to London and provide local assistance in the promotion of British economic interests. Those overseas officers who are stationed in the British Empire are members of the Trade Commissioner Service while Foreign countries are served by the Commercial Diplomatic Service forming part of the British Diplomatic Missions and by the Consular Service.

Mr. T. M. Ainscough, C.B.E., was appointed His Majesty's Senior Trade Commissioner in India in January 1918 and opened an office in Calcutta in March of that year. For five years, owing to the pressing need for economy in the Public Service, he was singlehanded in covering this vast territory. In 1923, however, two additional Trade Commissioners were appointed to India. Mr. W. D. M. Clarke was posted to the Calcutta office and Major R. W. Clarke opened an office in Bombay at Exchange Buildings, Sprott Road, Ballard Estate. The territory is now divided between the Calcutta and Bombay posts and this development allows the Senior Officer to travel almost continuously to any part of India which may call for his attention and to devote his time to some of the broader politico-economic problems which are becoming so important in view of the changing political conditions in India.

Functions of Commissioner.—The primary duty of the British Trade Commissioner comprises the collection of information in regard to opportunities that may arise within his territory for securing and developing trade by British manufacturers and merchants, both in the United Kingdom and other parts of the British Empire. He is, therefore, enjoined carefully to watch and report from time to time to the Board of Trade and the Governments of the Dominions concerned on all matters affecting the trade, industry and commerce of his area. His general functions are to maintain cordial relations with the governing authorities of his area; to enter into personal relations with the Chambers of Commerce, Trade Associations, and similar bodies, and with the principal representative importers and local manufacturers; to visit the principal commercial centres; to report upon foreign competition, on financial and trade conditions, and new legislation affecting trade; to make an annual general report on the conditions and prospects of trade in his area; and to furnish special reports and monographs on

particular questions which are likely to be of interest to British manufacturers and exporters. He is also expected to supply a regular flow of commercial information of all kinds to his department; to maintain an active correspondence with firms in the United Kingdom or the Dominions who wish to extend their trade with his area; and to give all possible assistance to the representatives of British firms who may visit his territory.

Every effort is made by His Majesty's Trade Commissioners to keep in touch with British representatives and agents in India. The offices are equipped with a complete range of directories and reference books of all kinds and information is available with regard to such matters as tariff conditions, port dues and charges throughout the world, etc. A library consisting of over 1,000 catalogues of the leading British manufacturing engineers is maintained in Calcutta and Bombay, and firms desiring information with regard to specific manufacturers of particular machinery or processes are invited either to call personally or to communicate their requirements in writing. It is hoped that local importers and buyers will cooperate by making a more extended use of the information available in the offices and by bringing to the attention of the British Trade Commissioners any cases where the interests of exportes from the United Kingdom or the Dominions may be adversely affected by foreign competition or otherwise.

For many years British traders have deplored the fact that there have not been available officials with commercial experience who could help them in voicing their difficulties and in meeting foreign competition. As a rule these complaints eulogized the Consuls of other countries and invited the attention of Government to their many virtues. In response to this agitation the greatest care has been taken by the British Government to select, as their trade officers Overseas, men of sound commercial training and experience who have acquired some reputation in their respective spheres, and a comprehensive and businesslike organization has been built up at the Department of Overseas Trade, London, to deal with the information sent home. It now rests with the British mercantile community, both at home and also Overseas, to co-operate freely and frankly with the Trade Commissioners and to recognize the work they are doing in the Imperial interest by assisting them with such information and particulars with regard to foreign competing goods, conditions of trade, etc., as they are able to afford.

H. M.'s TRADE COMMISSIONERS IN INDIA.

Calcutta—

Mr. T. M. Ainscough, C.B.E.,

His Majesty's Senior Trade Commissioner in India and Ceylon.

Mr. W. D. Montgomery Clarke,

His Majesty's Trade Commissioner at Calcutta.

Post Box No. 683, Fairlie House, Fairlie Place.

Telegraphic Address—" Tradcom, Calcutta."

Telephone No. " Calcutta 1042."

Bombay—

Major R. W. Clarke,

His Majesty's Trade Commissioner at Bombay.

Post Box No. 815, Exchange Buildings, Sprott Road, Ballard Estate.

Telegraphic Address—" Tradcom, Bombay"

Telephone No.—" Bombay 23095."

Ceylon—

Imperial Trade Correspondent,

The Principal Collector of Customs Colombo.

INDIAN COTTON DUTIES ACT.

The origin of this fiscal measure dates back to 1894 when the embarrassment caused to the finances of India by the fall in exchange drove the Government of India to the necessity of adopting measures to increase their sources of revenue. Among these measures was the re-imposition of the Customs Tariff which had been in force prior to 1882 subject, however, to this difference that cotton yarns and fabrics, which had formerly been subjected to an import duty, were in 1894, excluded from the list of dutiable articles. This partial re-imposition of import duties had been recommended by the Herschell Commission which, in reporting in 1893 on the currency question, had favoured this method of adding to the revenue as being the least likely to excite opposition. In point of fact, however, this recommendation which was carried into effect in the Indian Tariff Act of March 1894 gave rise to very marked opposition. In support of their policy the Government appealed to the Resolutions passed in 1877 and reaffirmed in 1879 by the House of Commons, the first of which had condemned the levy of import duties on cotton fabrics imported into India as "being contrary to sound commercial policy," while the latter called upon the Government of India to effect "the complete abolition of these duties as being unjust alike to the Indian consumer and to the English producer." It was, however, an open secret that the decision to exclude from the list of dutiable articles cotton yarns and fabrics was not the decision of the Government of India but that of the Secretary of State. It was pertinently pointed out that the volume of trade in cotton goods and

yarns then represented nearly one-half of the total imports from abroad, and that the exemption of these important commodities when practically every single other commodity was being subjected to an import duty could not be justified on its merits as a sound fiscal measure, much less when it was an admitted fact that the Budget would still show a deficit.

Excise Duties Imposed.—The opposition to this measure, though it failed to secure its rejection in the Legislative Council, was strong enough to induce the Secretary of State to reconsider the matter. Yielding to the united representations of the Government of India and of Indian public opinion, His Majesty's Government eventually agreed to the re-imposition of import duties on cotton yarns and fabrics provided that it could be shown that such a measure was necessitated by the position of Indian finances, and that it was combined with an Excise duty which would deprive the import tax of any protective character. Accordingly in December 1894, consequent on the further deterioration in the financial position, two bills were introduced in the Legislative Council. The first of these subjected cotton yarns and fabrics to the general import duty of 5 per cent. *ad valorem*. The second imposed an Excise duty on all cotton yarns of 20's and above produced by Mills in British India. In introducing this latter Bill the then Finance Minister, Sir James Westland, was careful to explain that the policy underlying its provisions had been imposed on the Government of India by the Secretary of State in pursuance of the Resolution of the House of Commons quoted above. The provisions of this particular Bill are of little interest. From the first it was recognised that they were unpractical, Lancashire and Indian spinners disagreed as to the point at which the line should be drawn exempting Indian yarns from the Excise Duty. Practical difficulties were pointed out by Indian spinners as to the impossibility of spinning precisely to a particular count. From the Lancashire point of view it was contended that the Bill offered facilities for evasion while it was admitted that under the system adopted in the Bill, the taxation of Indian and Lancashire products was not being carried out on a similar basis.

Act of 1896.—The Act was in fact doomed to be short-lived, and in December 1895 the Government of India were compelled to reconsider the whole position and to introduce an entirely new measure which became law in January 1896 as the Indian Cotton Duties Act II of 1896. This measure proceeded from two conclusions, namely, that no attempt should be made to obtain any duty from yarns whether imported or locally manufactured, and that an equal rate of duty should be applied to all woven goods whether imported or of Indian origin. With the object of conciliating the opposition, the rate of duty was fixed at 3½ per cent. as opposed to the general rate of Customs duty of 5 per cent. The main provisions of the Act provided that the assessment for the purposes of collecting the Excise duty should be based on returns submitted by the mill-owners; and that provision should be made for a rebate in the case of woven goods exported out of India. No control beyond a requirement that statistical returns should be furnished was attempted in respect of spinning mills. On the other hand certain concessions in the matter of import duty on Mill stores were made by executive order so as to place Indian Mills on a footing more or less equal to their Lancashire competitors.

Criticisms of the Measure.—It is not possible within the limits of the present article to do more than summarise the criticisms with which this measure was received in India. Much of the opposition was based on grounds of a transient character; as for instance that the Indian industry was then in a state of continued depression and that it had been hard hit, particularly in respect of its export trade, by the currency legislation, and by the uncertainty as to the fiscal policy of Government. In some quarters objection was offered to the exemption of yarn, which was shown, would place the Indian hand weaving industry at an advantage with the Indian power weaving industry. But the hostility to this measure, as also to the earlier measures already described, clearly proceeded from the feeling that the policy of the Government of India and of the Secretary of State had been dictated by Lancashire, and that the action of Lancashire was due not so much to the fact that there was any real competition between Indian and Manchester goods, but to a desire to handicap the Indian industry whose progress was already causing uneasiness to Lancashire interests. It was argued that the imports from Lancashire were practically all of the higher counts, which, for climatic and other reasons, Indian mills could not produce: that in any case the advantage to the Indian millowner of the import duty was inconsiderable and was counterbalanced by certain drawbacks, arising from the inferiority of Indian labour, which could not be overcome; and that this advantage, such as it was, could scarcely be said to have a protective character, in view of the higher cost of initial equipment in the case of an Indian mill which has to import its machinery, and of working expenses consequent on the scarcity of skilled labour and on the necessity of importing stores required in the production of cloth. Finally, from the standpoint of the consumer, very severe criticism was directed against the reduction, in favour of imported cotton goods, of the general rate of duty from 5 per cent. to 3½ per cent. on the ground that the effect of the legislation would relieve the richer classes who were consumers of the finer Manchester fabrics and impose new taxation on the poorer classes whose requirements were met by the Indian mills.

Later Factors in the Situation.—Since the passing of this measure into law the policy of the Government of India in this respect has frequently been the subject of attack in the press and in the Legislatures in India, while it has also formed the subject of continued representations by the industrial interests affected and political organizations. In more recent years the agitation in favour of the abolition of the Excise duties was revived by the growth in England of a strong body of public opinion in opposition to the policy of Free Trade. Advantage was taken of this new phase in English economic thought to press on behalf of India the acceptance of a policy of Protection—now adopted by the Government of India in the

form of discriminating use of the current necessarily high important tariff for fostering Indian industries—and the removal of the Excise duties was claimed by the opponents of this measure as a necessary corollary of the application to the British Empire of the principles associated with the name of Mr. Chamberlain. A new factor in the situation which strengthened the position of those who were in opposition to the Excise duties was to be found in the severe competition which Indian mills have to face in China as well as in India from the Japanese industry. The Japanese market was lost to India in the early years of this century. More recently, however, Japan has entered as a competitor with India into the China market, while within the last few years it has pushed its advantage as against the Indian millowner in the Indian market itself.

Policy of 1917.—The policy of Government towards the Cotton Duties underwent a further development in 1917. In the budget of that year provision was made for interest and sinking fund charges on £ 100 millions, the contribution of India towards the cost of the war. This demanded in addition to the natural increase in the revenues fresh taxation to the extent of £ 3 millions per annum. Amongst the expedients adopted to produce this revenue was the raising of the import duty on cotton goods from 3½ per cent. to 7½ per cent. which is the general tariff rate. At the same time the cotton excise duty was fixed to remain at the previous figure of 3½ per cent.. thus giving the indigenous industry a slight protection to the extent of 4 per cent. The question of the abolition of the Excise entirely had to be dismissed from consideration in view of the demands upon the exchequer, as it was estimated to produce in 1917-18 £ 320,000. By means of the increase in the tariff on Cotton Duties the Finance Member estimated to produce an additional £ 1 million per annum. The proposal was received with immense satisfaction in India as a step towards the righting of what is almost everywhere regarded as a reverse economic wrong. It aroused very vehement protests in Lancashire where the cotton industry organised its political vote and brought great pressure to bear upon the Secretary of State to withdraw the measure. Mr. Austen Chamberlain, the then Secretary of State for India, stood firm and with the Government at his back refused to budge an inch from the position which he had taken up in supporting the Government of India in this matter. There were anxious moments in the House of Commons when the Labour Party joining with the Irish Nationalists and the Lancashire vote mobilised its forces against the Government especially as the attitude of Mr. Asquith and his following was obscure. In the end Mr. Asquith gave his support to the Government policy on the understanding that this, in common with all other fiscal issues, would be reconsidered at the end of the war. With this support, the Bill was carried through the House of Commons by a large majority.

The Recent Position.—The question has frequently come under discussion in the Indian Legislature during the past few years and the new political constitution alters its perspective there inasmuch as it subjects taxation not merely to debate but to the actual votes of both Council of State and Legislative Assembly. The latter house paid most attention to the Excise and both the annual Budgets and the right of unofficial members to move Resolutions afforded opportunities for pressing the popular view upon Government. During the life of the first Assembly—1921-1923, inclusive—the position was still dominated by the financial difficulties of Government and the necessity for utilising every possible source of income for meeting successive deficits.

Excise Duty Suspended.—In November 1925 two months after further pressure from the Legislative Assembly, which Government at the time indicated that they would regard as decisive so far as public opinion on the question of the rival claims reduction of provincial contributions and abolition of the Excise Duty was concerned, an Ordinance to suspend levy and the collection of the Cotton Excise Duty was issued. Thatr Odinance stated that the duty would not be levied and collected or assessed on any cotton goods produced in any mill in British India on or after December 1, 1925, and before March 1, 1926. At the same time a statement was issued by the Governor-General explaining the reasons which led him in exercise of the powers conferred upon him by the Government of India Act, to promulgate that Ordinance. The statement was as follows:—"In August last when replying to a deputation which waited upon me on behalf of the millowners of Bombay and Ahmedabad to urge the relief of the mill-industry from the cotton excise duty I affirmed the Government of India stood by the letter and the spirit of the pledge given by my predecessor, Lord Hardinge, that the excise duty would be abolished as soon as financial considerations permitted. At the same time while fully recognising the special difficulties, with which the cotton mill industry in India was faced, it was necessary for me to explain that it was impossible to grant this request in the middle of the financial year before the year had fully declared itself and before the commitments and the prospects of next year were known.

"Again, on the 16th September 1925 when a motion for suspension of the collection of the cotton excise duty was debated in the Legislative Assembly it was made clear on behalf of Government that suspension must inevitably be followed immediately by abolition and that abolition ought to be considered only in connection with the finances of the year as a whole, that is, at the time of the budget when the claims of the cotton mill industry could be balanced against rival claims. It was definitely stated that a vote for suspension would be taken by Government as an expression of the view that the abolition of the cotton excise duty should take precedence of other claims. The Assembly accepted by a large majority the motion for suspension.

"The time has not yet come when a detailed estimate of the revenue and expenditure of the current year or of the prospects for 1926-27 can be made, but the final results of the monsoon are now known and it is possibly to make a

more reliable estimate of the financial position than in September. On such information as is now before them, the Government of India are satisfied that there would be no serious risk of a large deficit in the current year if the cotton excise duty were suspended for the rest of the year and that there is a reasonable prospect that the budget for next year can be balanced without assistance from the cotton excise duty in the absence of any big change for the worse in the next few months.

"I and my Government have, therefore, come to the conclusion that the moment has arrived when financial considerations permit of the abolition of the duty. This can, however, be finally accomplished only by the passage of the necessary legislation by the Indian Legislature."

"In the meanwhile having regard to the emergency caused by the grave difficulties confronting the industry, to the pledge given and reaffirmed and to the expressed views of the Legislative Assembly, I have decided that with effect from the 1st December 1925 the duty shall be suspended by Ordinance. It is the intention of my Government, unless the financial position as disclosed in the budget estimates for next year substantially fails to confirm present anticipations, to place before the legislature at the time of the budget proposals for the abolition of the duty."

The duty, having thus been suspended till the end of the financial year, 1925-26, was finally abolished in the Budget and Finance Bill for 1926-27 passed by the Legislature in March 1926.

The statistics of yarn and cloth production previously maintained under the Cotton Duties Act are still compulsory under the authority of Act XX of 1916 (The Cotton Industry Statistics Act.)

THE INDIAN CENTRAL COTTON COMMITTEE.

The Indian Central Cotton Committee of 1917-18, a full summary of whose report appears on pages 291-294 of the Indian Year Book of 1922, reviewed the position of cotton growing in India very thoroughly and made a series of recommendations for the improvement of cotton growing and marketing which have proved to be of the greatest value. One of their recommendations was that a permanent Indian Central Cotton Committee should be established to promote the welfare of the cotton-growing industry generally, to advise the Government of India and Local Governments in regard to matters of cotton policy, especially with reference to legislation for the prevention of ma-practices and similar matters.

The Indian Central Cotton Committee was appointed by resolution of the Government of India in April 1921, and worked as an advisory body until 1923. Another recommendation of the original Committee was that a cotton cess should be levied to provide funds for the work of the Central Cotton Committee and for agricultural and technological research on cotton. The Cotton Cess Act was passed in 1923 and at the same time the Central Cotton Committee was incorporated and its members ship enlarged in order to make it fully representative of all sections of the industry. Its constitution and present membership is as follows:—

President:—The Agricultural Adviser to the Government of India, *ex-officio* (Dr. D. Clouston, C.I.E.

Representatives of Agricultural Department.—Mr. R. D. Anstead, C.I.E., Director of Agriculture, Madras; Mr. T. F. Main, O.B.E., Director of Agriculture, Bombay; Mr. G. Clarke, C.I.E., Director of Agriculture, United Provinces; Mr. D. Milne, C.I.E., Director of Agriculture Punjab; Mr. F. J. Plymen, Director of Agriculture, Central Provinces; Mr. T. D. Stock, Deputy Director of Agriculture, Burma.

The Director-General of Commercial Intelligence and Statistics (*ex-officio*), Dr. D. B. Meek, O.B.E.,

Representatives of Chamber of Commerce and Associations.—Mr. W. Ellis Jones, (Vice-President), East India Cotton Association; Mr A. Fotiadi, Bombay Chamber of Commerce; Mr. S. D. Saklatwala, Bombay Millowners' Association; Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., M.L.A., The Indian Merchants' Chamber, Bombay; Mr. F. G. Travers, Karachi Chamber of Commerce; Seth Kasturbhai Lalbhai, M.L.A., Ahmedabad Millowners' Association; Mr. S. L. Symonds, Tuticorin Chamber of Commerce; Mr. S. H. Taylor, Upper India Chamber of Commerce; Lala Niranjan Prasad, Karachi Indian Merchants' Association; Mr. W. Roberts, Empire Cotton Growing Corporation.

Commercial Representatives Nominated by Local Governments.—Sir S. B. Mehta, Kt., C.I.E., Rao Bahadur J. J. Deshmukh, Central Provinces; Mr. Robert Lee, Madras; Rai Bahadur Lala Sewak Ram, M.L.C., Punjab; Mr. B. K. Lahiri, Bengal.

Co-operative Representative.—Rao Saheb V. Krishna Menon, B.A.

Representatives of Cotton Growers.—M. R. Ry., R. Appaswamy Naidu Garu; M. R. Ry.: B. P. Sesha Reddi Garu, Madras; Rao Bahadur Bhimbhai Ranchhodji Naik, M.L.C., Mr. Bakshi Darghansingh, Bombay; Kunwar Bikram Singh, M.L.C., Rai Saheb M. Amba Prasad, M.L.C., United Provinces; Sardar Ujjal Singh, M.A., M.L.C., Capt. L. H. G. Conville, Punjab; Rao Bahadur M. G. Deshpande; Mr. M. P. Kolhe, B.A., LL.B., M.L.C., Central Provinces and Berar.

Representatives of Indian States.—Mr. B. A. Collins, C.I.E., I.C.S., Director-General of Industries and Commerce, Hyderabad State; Mr. C. V. Sane, B. Ag., M. Sc., Director of Agriculture, Baroda State; Mr. H. H. Pandya, Administrative Officer, Department of Agriculture, Gwalior, Gwalior State; Mr. A. Howard, C.I.E., Director, Institute of Plant Industry and Agricultural Adviser to the States in Central India and Rajputana.

Additional persons nominated by the Governor-General in Council.—Mr. C. R. Palairet, Representative of the Indore State; Dr. W. Youngman, Economic Botanist to Government, Central Provinces; Rao Saheb Bhimbhai M. Desai

Deputy Director of Agriculture, Surat, Gujerat: Dr. W. Burns, Principal, Agricultural College, Poona, Mr. G. R. Hilson, Cotton Specialist, Madras; Dr. L. C. Coleman, Director of Agriculture, Mysore State.

Secretary.—Mr. J. H. Ritchie, M.A., B.SC., I.A.S.

Deputy Secretary.—Mr. W. J. Jenkins, M.A., B.SC., I.A.S. (on leave.)

Director:—Technological Laboratory.—Mr. A. James Turner, M.A., B. SC.

From the commencement the Central Cotton Committee took steps to deal with the various malpractices reported by the original Committee which by spoiling the reputation of the Indian cottons and rendering them less valuable for spinning purposes, were reducing the returns of the grower and causing great economic loss to the country at large.

The Cotton Transport Act passed in 1923 enables any Local Government with the consent of its Legislative Council to notify definite areas of cotton for protection and to prevent the importation of cotton from outside the area except under license. Prior to the passing of the Act inferior cottons were imported in large quantities into the staple cotton tracts for purposes of adulteration, and the reputation of several valuable cottons had been ruined by this abuse. The Act has now been applied to the most important staple cotton areas of the Bombay and Madras Presidencies and of the Baroda, Rajpipla, Chhota Udepur, Hyderabad and Holkar States and with excellent results.

More recently the **Cotton Ginning and Pressing Faotries Act, (XII of 1925)** has been passed which provides for a certain measure of control of ginning and pressing factories and especially for the marking of all bales of cotton pressed with a press mark and serial number which enables them to be traced to their origin. This Act, with the minimum of official interference, places the cotton trade in a position itself to deal with abuses, and should lead to a very marked improvement in the quality of Indian cottons.

The Central Cotton Committee has also devoted considerable attention to constructive action for the improvement of the marketing of cottons and to bringing to the notice of the trade, both in India and abroad, those improved varieties which have now reached a commercial scale and has carried out some important enquiries into the financing of the cotton crop up-country and primary cotton marketing. As an instance of the progress in cotton growing which has been made since 1917 it may be stated that since that date approx imately half a million bales of cotton of about 1" staple have been added to the Indian crop by the work of the Agricultural Departments. In general it may be said that the Committee affords a common meeting ground for representatives of all sections of the Cotton trade and of the cotton-growing industry thus enabling a number of problems to be tackled from every point of view and definite progress made towards their solution.

Research Studentships.—The Committee has also instituted a scheme of research studentships to enable distinguished graduates of Indian Universities to undertake research on cotton problems under the direction of experienced reasearch workers in India. Six to eight such studentships are awarded every year.

Statistics—By the efforts of the Committee great improvement has been effected in cotton statistics. The compilation of statistics relating to the raw cotton received, and of raw cotton consumed in the spinning mills in the British provinces and in the States of Hyderabad, Mysore, Baroda, Gwalior and Indore, the establishment of statistical returns relating to the number of bales of raw cotton pressed weekly in every Province and many of the Indian States, and the revival of the rail-borne trade returns of cotton for trade blocks are some of the results already achieved by the Committee in this direction.

Research.—By means of the Cotton Cess the Committee is provided with funds for the promotion of research. It maintains in Bombay a fully equipped Technological Laboratory which includes a complete experimental, spinning plant and a scientific laboratory for research on the cotton fibre. This laboratory provides Agricultural Departments with complete and authoritative reports on the spinning value of new cottons, thus providing a much needed facility. In addition it is now possible to undertake research work on a number of questions connected with the spinning qualities of cotton which have not been touched in the past. The Laboratory is unique in that it is probably the only institution of its kind which approaches the subject primarily from the standpoint of the grower.

The Committee contributes the greater part of the funds for the Indore Institute of Plant Industry which is a Central Agricultural Research Institute for cotton where many problems of fundamental importance are being studied.

In addition by means of grants-in-aid to Agricultural Departments it has provided for special investigations on problems of general applicability which would otherwise have been left untouched through lack of staff and funds. Such schemes are in operation in all major cotton-growing provinces and now number thirteen.

His Excellency the Viceroy (Lord Reading) when he visited Bombay in December 1924 and formally opened the Committee's Spinning Laboratory laid great stress on the importance and value of the Committee's work.

THE EAST INDIA COTTON ASSOCIATION, LIMITED.

Bombay.—The Association is the out come of the findings of the Indian Cotton Committee which was appointed by the Governor-General in Council under a resolution dated September 27th, 1917. Until the end of 1917 the Cotton Trade of Bombay was in the hands of seven distinct bodies, *viz.*, The Bombay Cotton Trade Association, Ltd., The Bombay Cotton Exchange, Ltd., The Bombay Millowners' Association, The Bombay Cotton Brokers' Association, Ltd., The Marwari Chamber of Commerce, The Bombay Cotton Merchants' and Muccadums' Association, Ltd., and The Japanese Cotton Shippers' Association. None of these

bodies were representative of the trade as a whole and their interests often came into conflict with each other. The necessity of a system of periodical settlements, such as existed in Liverpool, was badly felt, especially when speculation was rife in futures which was so excessive in 1918 that the Trade had to invoke the aid of Government to prevent a financial crisis.

The Cotton Contracts Committee was created under the Defence of India Act in June 1918 as a temporary measure under the Chairmanship of Mr. G. Wiles, I.C.S. This body was replaced by the Cotton Contracts Board in 1919, which continued to function until May 1922, when the Act under which the Board worked was repealed and its functions were carried on by the newly constituted East India Cotton Association who were granted a charter by Act No. XIV of 1922. Since then the Association, subject to its By-laws being passed by Government, have controlled the Cotton Trade of Bombay.

The present constitution of the Board is as follows:—Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., M.L.A., President, Importers' Panel; Haridas Madhavdas, Esq., Vice-President, Exporters' Panel; The Hon'ble Mr. Ratansey D. Morarji, Lalji Naranji Esq., F. F. Stileman, Esq., Millowners' Panel; C. P. Bramble Esq., G. Boyagis, Esq., Exporters' Panel; K. H. McCormack, Esq., Piareylal Sheomukhrai, Esq., Importers' Panel; F. G. Travers, Esq., Lowjee Meghjee Esq., Commission Agents' and Merchants' Panel; Jetha Chai Devji, Esq., Purshotam Jivandas, Esq., Jethawallas' Panel; Major W. Ellis Jones, Anandilal Fodar, Esq., Chunilal B. Mehta, Esq., Brokers' Panel.

Officers.

D. Mehta, Esq., B.A., Secretary, F. F. Wadeson, Esq., J.P., Manager, Clearing House, C. M. Parikh, Esq., B. Com., Assistant Secretary.

Some of the objects for which the Association is established are:—To provide and maintain suitable buildings or rooms for a Cotton Exchange in the City of Bombay and elsewhere in India and to regulate admission to and prohibition of the use thereof and the nature and times of such user whether in the case of the general body or particular classes or any individual or firm or company using the Exchange; to provide forms of contracts compulsory or permissive and regulate the making, carrying out and enforcement or cancellation of contracts; to adjust by arbitration or otherwise controversies between persons engaged in the Cotton Trade; to establish just and equitable principles in the said Trade; to maintain uniformity of control of the said trade; to fix or adopt standards of classification of cotton, to acquire, preserve and disseminate useful information connected with the Cotton interest throughout all markets: to decrease or insure the local risk attendant upon business; and generally to control, promote and regulate the Cotton Trade in the Presidency of Bombay and elsewhere in India, improve its stability and augment the facilities with which it may be conducted. To establish and maintain a Clearing House for the purpose of dealing with cotton transactions, and to regulate admission to and prohibition of the user thereof and the nature and times of such user whether in the case of the general body or particular classes or any individual or firm or company using the Clearing House. To regulate the handling and exportation of Cotton from India and the importation of Cotton into India in so far as it may be imported. To bring, prosecute, or defend, or aid in bringing, prosecuting, or defending any suits, actions proceedings, applications, or arbitrations on behalf of Members or Associate Members or Special Associate Members or otherwise as the Directors of the Association may think proper or conducive to the objects of the Association, and to prescribe the principle of framing of contracts with a view to eliminate the temptation and possibility of speculative manipulation.

The Association has erected a fine Exchange Building at Sewri Cotton Depot, containing 112 Buyers' Rooms and 91 Sellers' Rooms, and a large Trading Hall on the lines of Liverpool and New York Exchanges.

The inaugural ceremony of the opening of the Exchange Building was performed by His Excellency Sir Leslie Wilson, Governor of Bombay on the 1st December 1925 in the presence of a large gathering which included most of the prominent business men of the City and many leading citizens.

There is a membership of 445 members.

The Bombay Cotton Annual containing matters relating to every branch of the Trade is published annually in November and statistics are issued twice weekly.

The Textile Industry.

India has been the home of the cotton trade from the earliest times. Its cotton, known as white wool, was well known to the ancients and its cloth was familiar to the West in the days of the overland route. The name Calico comes from the fine woven goods of Calicut, and the products of the Dacca handlooms are still remarkable as the finest muslins human skill can produce.

Indian Cotton.

The exports of Indian cotton began to assume importance with the opening of the sea route. They received an immense stimulus during the American Civil War, when the close blockade of the Confederate ports produced a cotton famine in Lancashire, and threw the English spinners back on India for their supply of raw material. When the war broke out the shipments of Indian cotton were 528,000 bales, but during the last year of the war they averaged 973,000 bales. Most of this cotton was sold at an enormously inflated price, and induced a flow of wealth into Bombay, the great centre of the trade, for which there was no outlet. The consequence was an unprece-

dented outburst of speculation known as the ' Share Mania," and when the surrender of Lee re-opened the Southern Ports widespread ruin followed. It is estimated that the surplus wealth brought into the country by the American Civil War aggregated £92 millions. Since then the cultivation of Indian cotton, although interrupted by famine, has steadily increased. For the last season for which returns are available 1926-27 the total area in all the territories reported on was computed at 25,006,000 acres which is 1,194,000 acres the revised figures of last year. The total estimated outturn was 4,952,000 bales of 400 lbs. which is 528,000 bales below the yield of last year.

Bombay, the Central Provinces and Hyderabad are the chief producing centres. The following table gives the rough distribution of the outturn. The figures are the estimated figures for the past season, and are not exact, but they indicate the distribution of the crop :—

Provinces and States.	1927-28.	
	Acres in Thousands.	Bales of 400 lb (In thousands)
Bombay (a)	6,912	1,431
Central Provinces and Berar	4,848	1.145
Madras (a)	1,946	391
Punjab (a)	2,074	605
United Provinces (a)..	647	200
Burma	342	67
Bengal (a)	78	20
Bihar and Orissa	77	14
Assam	45	15
Ajmer-Merwara	42	14
North-West Frontier Province	11	2
Delhi	2	1
Hyderabad	3,631	951
Central India	1,263	247
Baroda	806	127
Gwalior	585	115
Rajputana	422	110
Mysore	81	25
Total	23,812	5,480

(*a*) Including Indian States.

Exports of Raw Cotton.

Countries.	1924-25. Cwts.	1925–26. Cwts.	1926–27. Cwts.	1927-28. cwts.
United Kingdom	577,760	803,620	309,280	572,000
Germany	622,800	777,600	516,560	915,980
Holland	135,080	169,480	105,560	125,560
Belgium	718,000	868,200	566,700	820,320
France	478,580	687,800	440,360	659,700
Spain	343,500	260,280	192,500	219,460
Italy	1,731,360	1,628,760	1,088 400	1,180,520
Austria	27,740	6,900	3,640	200
Ceylon	15,260	24,400	15,100	138,260
Indo-China	96,440	155,960	74,280	18,140
China	1,014,440	1,948,160	1,400,300	398,980
Japan	5,969,100	7,444,540	6,577,460	4,409,900
United States of America ..	117,400	110,640	74,700	116,180
Other Countries	29,520	17,660	20,920	18,380
(cwt.) ..	11,877,040	14,904,000	11,385,760	9,593,580
Total Bales (400 lbs.) ..	3,326,410	4,173,120	3,188,011	2,686,202

Bombay is the great centre of the cotton trade. The principal varieties are Dholleras, Broach, Oomras (from the Berars), Dharwar and Coomptas. Broach is the best cotton grown in Western India. Hinganghat cotton, from the Central Provinces, has a good reputation. Bengals is the name given to the cotton of the Gangetic valley, and generally to the cottons of Northern India. The Madras cottons are known as Westerns, Coconadas, Coimbatores and Tinnevellys. The best of these is Tinnevelly. Cambodia cotton has been grown with success in Southern India, but it shows a tendency to revert. The high prices of cotton realised of recent years have given a great impetus to cultivation. Government have also been active in improving the class of cotton produced, by seed selection, hybridization and the importation of exotic cottons. Although these measures have met with a considerable measure of success, they have not proceeded far enough to leaven the whole outturn, which still consists for the mos part of a short-staple early maturing variety suitable to soils where the rainy season is brief

Reference has been made to the popularity of the Indian handloom cloths in the earliest days of which we have record. This trade grew so large that it excited alarm in England, and it was killed by a series of enactments, commencing in 1701, prohibiting the use or sale of Indian calicoes in England. The invention of the spinning jenny and the power loom and their development in England converted India from an exporting into an importing country, and made her dependent on the United Kingdom for the bulk of her piece-goods. The first attempt to establish a cotton mill in India was in 1838, but the foundations of the industry were really laid by the opening of the first mill in Bombay in 1856. Thereafter, with occasional set backs from famine, plague and other causes, its progress was rapid.

The following statement shows the quantity (in pounds) of yarn of all counts spun in all India for the twelve months April to March, in each of the past 4 years:—

—	1925-26.	1926-27.	1927-28.
BRITISH INDIA.			
Bombay Presidency	423,450,896	512,021,482	491,839,977
Madras	† 57,836,673	64,497,984	68,729,564
Bengal	24,122,721	31,537,438	34,348,044
United Provinces	60,293,876	68.795,189	66,598,927
Ajmer-Merwara	4,545,208	4,513,436	4,230,410
Punjab	2,944,650	3,173,617	3,780,455
Delhi	8,060,573*	10,309,660	12,106,954
Central Provinces and Berar	40,428,204	38,895,498	42,860,080
Burma	1,688,070	480,113 (*b*)	63,975 (*c*)
TOTAL ..	623,370,871	734,224,414	724,558,386
FOREIGN TERRITORY.			
Indian States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad, Wadhwan, Gwalior (Ujjain) and Pondicherry (*a*)..	63,056,608	72,891,701	84,352,461
GRAND TOTAL ..	686,427,479	807,116,118	808,910,847

(*a*) Including the production of one mill only.
(*b*) Represents production during the 4 months April to July 1926 only, the mill being closed from August 1926.
(*c*) Represents production in March 1928.
† Includes 740,256 lbs. for which details are not available.
* Includes 64,285 lbs. ,, ,,
Note: The cotton mills in Burma started work in May 1923.

The spinning of yarn is in a large degree centred in Bombay, the mills of that province producing nearly 74 per cent. of the quantity produced in British India. The United Provinces of Agra and Oudh and Madras produced about 7 per cent. and 8 per cent. respectively, while Bengal and the Central Provinces produced 4·7 and 5·2 per cent. Elsewhere the production is as yet very limited.

Bombay Island.

Here is a detailed statement of the quantity (in pounds) and the counts, or numbers, of yarn spun in Bombay island :—

——	1925-26.	1926-27.	1927-28.
Nos. 1—10	56,981,442	72,797,525	61,759,076
,, 11—20	116,958,465	153,361,083	131,023,571
,, 21—30	79,114,206	104,049,359	107,482,226
,, 31—40	5,885,390	9,201,370	12,279,694
Above 40	2,503,388	4,306,898	5 028,497
Wastes, &c.	519,627	1,142,795	1,173,798
Total ..	261,962,518	344,859,030	318,746,862

Yarn at Ahmedabad.

The corresponding figures for Ahmedabad are as follows :—

——	1925-26.	1926-27.	1927-28.
Nos. 1—10	3,015,632	2,559,688	2,324,475
,, 11—20	44,782,933	40,001,658	39,908,359
,, 21—30	47,050,486	50,259,987	55,662,155
,, 31—40	5,765,488	8,261,613	9,622,451
Above 40	2,126,152	4,824,932	3,595,276
Wastes, &c.	....	....	....
Total ..	102,740,691	105,907,878	111,112,716

Yarn Spun throughout India.

The grand totals of the quantities in various counts of yarn spun in the whole of India including Native States, are given in the following table:—

——	1925-26.	1926-27.	1927-28.
Nos. 1—10	95,723,695	114,644,530	105,970,987
,, 11—20	349,024,541	401,036,310	388,816,751
,, 21—30	213,788,357	248,310,875	263,052,948
,, 31—40	19,737,483	27,656,853	33,757,097
Above 40	5,834,324	11,531,458	11,141,821
Wastes, &c.	1,514,538	3,936,092	6,171,243
Total ..	686,427,479	807,116,118	808,910,847

In the early days of the textile industry the energies of the millowners were largely concentrated on the production of yarn, both for the China market, and for the handlooms of India. The increasing competition of Japan in the China market, the growth of an indigenous industry in China and the uncertainties introduced by the fluctuations in the China exchanges consequent on variations in the price of silver compelled the millowners to cultivate the Home market. The general tendency of recent years has been to spin higher counts of yarn, importing American cotton for this purpose to supplement the Indian supply, to erect more looms, and to produce more dyed and bleached goods. This practice has reached a higher development in Bombay than in other parts of India, and the Bombay Presidency produces nearly 78·8 per cent. of the cloth woven in India. The United Provinces produces 3·2 per cent., the Central Provinces 4 per cent. and Madras 4 per cent. Grey and Bleached goods represent nearly 74 per cent. of the whole production.

ANALYSIS OF WOVEN GOODS.

The following brief extract is taken from the statement of the quantity (in pounds and their equivalent in yards) and description of woven goods produced in all India, including Native States :—

—	1925–26.	1926–27.	1927–28.
Grey and Bleached piece-goods—			
Pounds	339,265,174	381,711,804	403,467,863
Yards	1,414,303,80[illegible]	1,577,237,587	1,675,002,583
Coloured piece-goods—			
Pounds	116,695,306	145,320,359	148,297,621
Yards	540,156,845	681,477,373	681,557,222
Grey and coloured goods other than piece-goods—			
Pounds	3,726,511	4.151,302	4 205,147
Dozens	955,804	1,006,548	992,107
Hosiery—			
Pounds	872,261	983,308	1,210,366
Dozens	316,546	35[illegible],909	437,215
Miscellaneous—			
Pounds	3,772,129	4,289,022	5,828,863
Cotton goods mixed with silk or wool—			
Pounds	707,712	2,313,760	4,794,002
Total—			
Pounds	465,039,069	538,769,353	567,803,862
Yards	1,954,466,667	2,258,716,06[illegible]	2,356,559,805
Dozens	1,272,350	1,358,467	1,429,322

BOMBAY WOVEN GOODS.

The output of woven goods during the three years in the Bombay Presidency was as follows :—

The weight (in pounds represents the weight of all woven goods ; the measure in yards represents the equivalent of the weight of the grey and coloured piece-goods.)

—	1925–26.	1926–27.	1927–28.
Pounds	342,030,412	407,282,500	421,590,878
Yards	1,510,385,860	786,327,396	1,823,517,162
Dozens	885,931	829,849	920,817

The grand totals for all India are as follows :—

—	1925–26.	1926–27.	1927–28.
Pounds	465,039,069	538,769,353	567,803,862
Yards	1,954,460,667	2,258,716,065	2,356,559,805
Dozens	1,272,350	1,358,467	1,429,322

Progress of the Mill Industry.

The following statement shows the progress of the Mill Industry in the whole of India

Years ending 30th June	Number of Mills.	Number of Spindles.	Number of Looms.	Average No of Hands Employed Daily.	Approximate Quantity of Cotton Consumed.	
					Cwts.	Bales of 392 lbs.
1877	51	12,44,206	10,385	Not stated.	Not stated.	Not stated.
1878	53	12,89,706	10,533	Do.	Do.	Do.
1879	56	14,52,794	13,018	42,914	9,36,547	2,67,585
1880	56	14,61,590	13,502	44,410	10,76,708	3,07,631
1881	57	15,13,096	13,707	46,430	13,26,461	3,78,989
1882	65	16,20,814	14,172	48,467	13,91,467	3,97,562
1883	67	17,90,388	15,373	53,476	15,97,946	4,56,556
1884	79	20,01,667	16,262	60,387	18,59,777	5,31,365
1885	87	21,45,646	16,537	67,186	20,88,621	5,96,749
1886	95	22,61,561	17,455	74,383	22,51,214	6,43,204
1887	103	24,21,290	18,536	76,942	25,41,966	7,26,276
1888	114	24,88,851	19,496	82,379	27,54,437	7,86,982
1889	124	27,62,518	21,561	91,598	31,10,289	8,88,654
1890	137	32,74,196	23,412	1,02,721	35,29,617	10,08,462
1891	134	33,51,694	24,531	1,11,018	41,26,171	11,78,906
1892	139	34,02,232	25,444	1,16,161	40,80,783	11,65,938
1893	141	35,75,917	28,164	1,21,500	40,98,528	11,71,008
1894	142	36,49,736	31,154	1,30,461	42,78,778	12,22,508
1895	148	38,09,929	35,338	1,38,669	46,95,999	13,41,714
1896	155	39,32,946	37,270	1,45,432	49,32,613	14,09,318
1897	173	40,65,618	37,584	1,44,335	45,53,276	13,00,936
1898	185	42,59,720	38,013	1,48,964	51,84,648	14,81,328
1899	188	47,28,333	39,069	1,62,108	58,63,165	16,75,190
1900	193	49,45,783	40,124	1,61,189	50,86,732	14,53,352
1901	193	50,06,936	41,180	1,72,883	47,31,090	13,51,740
1902	192	50,06,965	42,584	1,81,031	61,77,633	17,65,038
1903	192	50,43,297	44,092	1,81,399	60,87,690	17,39,340
1904	191	51,18,121	45,337	1,84,779	61,06,681	17,44,766
1905	197	51,63,486	50,139	1,95,277	65,77,354	18,79,244
1906	217	52,79,595	52,668	2,08,616	70,82,306	20,23,516
1907	224	53,33,275	58,436	2,05,696	69,30,595	19,80,170
1908	241	57,56,020	67,920	2,21,195	69,70,250	19,91,500
1909	259	60,53,231	76,898	2,36,924	73,81,500	21,09,000
1910	263	61,95,671	82,725	2,33,624	67,72,535	19,35,010
1911	263	63,57,460	85,352	2,30,649	66,70,531	19,05,866
1912	268	64,63.929	88,951	2.43,637	71,75,357	20,59,102
1913	272	65,96,862	94,136	2,53,786	73,36,056	20,96,016
1914*	271	67,78,895	1,04,179	2,60,276	75,[illegible]0,941	21,43,126
1915*	272	68,48,744	1,08,009	2.65,346	73,59,212	21,02,632
1916*	266	68,39,877	1,10,268	2,74,361	76,92,013	21,97,718
1917*	263	67,38,697	1,14,621	2,76,771	76,93,574	21,98,164
1918*	262	66,53,871	1,16,484	2,82 227	72,99,873	20,85,678
1919*	258	66,89,680	1,18,221	2,93,277	71,54,805	20,44,230
1920*	253	67,63,876	1,19,012	3,11,078	68,33,113	19,52,318
1921*	257	68,70,804	1,23,783	3,32,176	74,20,805	21,20,230
1922*	298	73,31,219	1,34,620	3.43,723	77,12,390	22,03,540
1923*	333	79,27,938	1,44,794	3,47,380	75.30,943	21,51,698
1924*	336	83,13,273	1,51,485	3,56,887	67,12,118	19,17,748
1925*	337	85,10,633	1,54,202	3,67,877	77,92,085	22,26,310
1926*	334	87,14,168	1,59,464	3,73,508	73,96,844	21,13,384
1927*	336	87,02,760	1,61,952	3,84,623	84,60,942	24,17,412

* Year ending 31st August.

Statement of the amount in rupees of Excise duty realised from goods woven in the Cotton Mills in British India under the Cotton Duties Act II of 1896; also the amount of equivalent duty levied in the Native States; in each year from 1902-1903 to 1925-26.*

———	Bombay.	Madras.	Bengal.	United Provinces and Ajmer-Merwara.	Punjab and Delhi.	Central Provinces and Berar.
1902-03	15,84,121	67,813	6,605	74,023	3,031	1,30,620
1903-04	17,64,527	62,350	10,908	89,189	1,104	1,56,371
1904-05	20,43,832	65,379	11,929	96,710	2,607	1,61,368
9105-06	22,78,425	1,10,943	11,165	1,32,364	5,144	1,68,743
1906-07	24,36,265	1,32,693	23,709	1,35,884	7,464	1,64,680
1907-08	28,82,296	1,35,131	31,556	1,66,044	8,746	1,75,944
1908-09	29,51,859	1,42,295	53,351	1,88,345	9,509	1,98,419
1909-10	33,88,658	1,45,333	55,822	1,92,552	6,611	2,17,217
1910-11	36,78,555	1,48,136	56,359	1,82,083	7,300	2,07,818
1611-12	42,17,878	1,65,048	48,631	1,84,653	10.862	2,52,415
1912-13	48,27,698	2,06,862	81,709	2,11,847	17,971	2,71,882
1913-14	45,68,188	2,13,166	78,951	2,55,467	22,353	3,00,919
1914-15	42,31,546	1,83,880	53,046	2,07,454	10,068	2,54,937
1915-16	42,25,608	2,11,456	41,704	2,01,012	9,291	2,36,497
1916-17	35,38,236	2,87,043	70,529	2,47,991	24,183	2,93,466
1917-18	64,13,806	7,09,467	1,18,336	2,91,052	38,628	3,49,490
1918-19	1,16,18,396	7,48,545	2,10,582	5,07,555	56,612	6,75,343
1919-20	1,28,66,707	7,67,021	3,32,972	6,12,726	68,383	8,66,681
1920-21	2,03,33,415	7,50,690	3,17,920	6,97,185	73,846	9,19,814
1921-22	1,93,50,732	6,54,913	2.65,202	6,85,350	67,825	9,02,784
1921-23	1,59,18,696	8,46,783	2,27,530	7,29,192	1,50,077	8,61,929
1923-24	1,29,37,458	8.09,127	2,22.633	6,79.023	1,80,883	7,52,779
1924-25	1,87,03,383	9.04,416	2,63,012	7,81,689	2,12,944	9,01,145
1925-26	1,24,05,753	6,31,036	2,88,975	5,30,775	1,88,632	5,90,344

———	Total British India.		Native States.	Grand Total.	
	Gross duty.	Net duty.	Gross duty.	Gross duty.	Net duty.
1902-03	18,66,213	18,25,469	65,541	19,31,754	18,91,010
1903-04	20,77,449	20,36,104	59,061	21,36,510	20,95,149
1904-05	23,81,825	23,33,636	67,320	24,49,145	24,06,976
1905-06	27,06,784	26,71,061	83,455	27,90,239	27,54,516
1906-07	29,00,957	28,64,202	81,976	29,82,671	29,46,152
1907-08	33,99,717	33,55,946	97,499	34,97,216	34,53,442
1908-09	35,43,773	34,98,480	1,14,498	36,58,276	36,12,977
1909-10	40,06,193	39,61,020	1,37,699	41,43,892	40,98,719
1910-11	42,26,575	1,75,878	1,75,878	44,56,129	44,01,707
1911-12	48,79,478	48,04,492	1,82,479	50,61,957	49,86,971
1912-13	56,17,969	55,76,567	2,21,178	58,39,147	57,97,745
1913-14	54,39,043	53,95,014	2,38,393	56,77,436	56,33,407
1914-15	49,40,931	49,32,185	2,33,160	51,74,091	51,65,345
1915-16	49,25,571	48,40,107	1,90,275	51,15,846	50,30,382
1916-17	44,61,448	43,80,425	2,47,301	47,08,749	46,27,726
1917-18	76,20,779	75,45,252	3,84,780	80,05,559	79,37,032
1918-19	1,38,17,033	1,36,79,252	5,07,891	1,43,24,924	1,41,87,143
1919-20	1,55,14,490	1,52,54,671	8,90,778	1,64,05,268	1,61,45,449
1920-21	2,30,92,870	2,28,71,827	9,65,902	2,40,58,772	2,38,37,729
1921-22	2,19,16,806	2,12,28,108	10,07,539	2,29,24,345	2,22,35,647
1922-23	1,87,34,207	1,74,22,997	11,53,142	1,98,87,349	1,85,76,139
1923-24	1,56,51,953	1,38,50,839	11,57,300	1,68,19,203	1,50,18,139
1924-25	2,17,66,893	2,12,25,643	16,20,395	2,33,86,988	2,28,45,739
1925-26	1,47,26,148	1,36,50,103	15,03,564	1,62,29,712	1,51,53,667

* The Cotton Duties Act was abolished in April 1926.

The Jute Industry.

Considering its present dimensions, the jute industry of Bengal is of very recent origin. The first jute mill in Bengal was started at Rishra in 1855, and the first power-loom was introduced in 1859. The original outturn was 8 tons per day. In 1909 it had grown to 2,500 tons per day, it is now 4,000 tons per day, and it shows every indication of growing and expanding year by year. Another interesting thing about the jute industry of Bengal is that, although it is practically a monopoly of Scotsmen from Dundee, the industry itself owes its inception to an Englishman. The founder of the industry was George Acland, an Englishman, who began life as a midshipman in the navy, and was for some years in the East India Marine Service. He quitted this service while still a young man, and engaged in commercial pursuits in Ceylon, where he was successful. Later on he turned his attention to Bengal, and arriving in Calcutta about 1853 he got into touch with the management of the paper works, then at Serampore, where experiments were being tried with country grasses and fibre plants to improve the quality or cheapen the manufacture of paper. This seems to have suggested to Acland the manufacture of rhea, and in 1854 he proceeded to England, with a view to obtaining machinery and capital in order to manufacture goods from that material. During this trip he visited Dundee, and while there Mr. John Kerr, of Douglas Foundry, suggested to him the importing of machinery into Bengal "where the jute comes from and spin it there." This suggestion bore fruit, for shortly afterwards Acland placed orders with Kerr for a few systems of preparing and spinning machinery, and returned to India the same year accompanied by his two sons and a few Dundee mechanics who were to assist him in erecting and operating the first jute mill in Bengal. This, as has been stated, was at Rishra, the site of the present Wellington mills, near Serampore, and here, in 1855, the first machine spun jute yarns were made. As not infrequently happens the pioneer got very little out of his venture. After several ups and downs the Acland interest in the Rishra mill ceased in 1867, and the company which Acland had formed in 1854 was wound up in 1868.

Power-looms.—The pioneer's example was followed by Mr. George Henderson of that silk and firm, and in 1859 the Borneo Jute Co. was launched under his auspices. To this company is due the credit of introducing the power-loom for jute cloth. Unhampered by the financial difficulties which had burdened the Aclands, the Borneo Jute Co. made rapid progress, doubling their works in 1864, and clearing their capital twice over. In 1872 the mills were turned into a limited liability company, the present "Barnagore Jute Manufacturing Co., Ld." Four other mills followed in succession—Gouripore, Serajgunge, and India Jute Mills.

"From 1868 to 1873," writes Mr. David Wallace in "The Romance of Jute," "the five mills excepting the Rishra mill simply coined money and brought the total of their looms up to 1,250." To illustrate the prosperity of the industry at this period we may take the dividends paid by the Barnagore Company. On the working of their first half year, a 15 per cent. interim dividend was declared, which seemed to justify the enormous capital at which the company was taken over from the Borneo Company, and shares touched 68 per cent. premium. The dividend for the first year, ending August 1873, was 25 per cent., for 1874, 20 per cent., and for 1875, 10 per cent. Then came a change. The investing public had forgotten the effect of the Port Canning bubble, and the condition of the jute industry in 1872-73 seeming to offer a better return than coal or tea, both of which had just enjoyed a boom, it was only necessary to issue a prospectus of a jute mill to have all the shares snapped up in the course of an afternoon.

In 1872–73 three new companies were floated locally—the Fort Gloster, Budge and Sibpore, and two Home companies, the Champdany and Samnugger, all of which commenced operations in 1874. In 1874–5 eight other mills were launched—the Howrah, Oriental (now Union), Asiatic (now Soorah), Clive, Bengal Pressing and Manufacturing Co. (now the Belliaghatta-Barnagore branch mill), Rustomjee (now the Central), Ganges (registered in England), and Hastings, owned by Messrs. Birkmyre Bros., of Greenock fame—in all thirteen new companies, coming on all of a heap and swelling the total looms from 1,250 up to 3,500. This was too much of a strain for the new industry, and for the next ten years all the mills had a severe struggle. The older ones all survived the ordeal, but four of the new concerns—the Oriental, the Asiatic, the Bengal Pressing and Manufacturing Co. and the Rustomjee—became moribund, to appear again later on under new names and management. Fort Gloster also suffered badly.

Between 1875 and 1882 only one new mill was put up. This was Kamarhatty, promoted by Messrs. Jardine, Skinner & Co., which came into being in 1877, as the result of Dr. Barry's visit to Calcutta in 1876, when he transferred the agency of the Gouripore Co. from Messrs. Jardine, Skinner & Co. to his own firm. This mill, together with additions made by some of the other mills, brought the total looms up to 5,150 in 1882. By the end of 1885 the total was further augmented by the Hooghly, Titaghur, Victoria and Kanknarrah mills, bringing the number of looms at work up to 6,700. From this period on to 1894 no new mills came into existence except the Calcutta Twist Mill, with 2,460 spindles, since merged into the Wellington branch of the Champdany Co. Between 1896 and 1900 the following new mills were started:—The Gordon Twist Mill with 1,800 spindles (now acquired by Anglo-India), Khardah, Gondolpara (French owned), Alliance, Arathoon, Anglo-India, Standard, National, Delta (which absorbed the Serajgunge), and the Kinnison. A lull of four years witnessed large extensions to the existing mills, after which came the following series of new mills, besides further heavy extensions—Dalhousie, Alexandra, Naihati, Lawrence, Reliance, Belvedere, Auckland, Kelvin and Northbrook

Progress of the Industry.

THE record of the jute industry may well be said to be one of uninterrupted progress. The following statement shews **quinquennial averages** from the earliest year for which complete information is available with actuals for each year from 1917-18 up to 1925-26 and the figures in brackets represent the variations for each period, taking the average of the quinquennium. from 1879-80 to 1883-84 as 100 :—

—	Number of mills at work.	Authorised Capital (in lakhs of Rs.)	Number (in thousands) of Persons employed daily (average.)	Looms.	Spindles.
Average—					
1879-80 to 1883-84 ..	21 (100)	270·7 (100)	38·8 (100)	5·5 (100)	88 (100)
1884-85 to 1888-89 ..	24 (114)	341·6 (126)	52·7 (136)	7 (127)	138·4 (157)
1889-90 to 1893-94 ..	26 (124)	402·6 (149)	64·3 (166)	8·3 (151)	172·6 (196)
1894-95 to 1898-99 ..	31 (148)	522·1 (193)	86·7 (223)	11·7 (213)	244·8 (278)
1899-1900 to 1903-04 ..	36 (171)	680 (251)	114·2 (294)	16·2 (295)	334·6 (380)
1904-05 to 1908-09 ..	46 (219)	960 (355)	165 (425)	24·8 (451)	510·5 (580)
1909-10 to 1913-14 ..	60 (286)	1,209 (443)	208·4 (537)	33·5 (609)	691·8 (786)
1914-15 to 1918-19 ..	73 (348)	1,403·6 (519)	259·3 (668)	39·7 (722)	821·2 (933)
1917-18	76 (362)	1,428·5 (528)	266 (686)	40·6 (738)	834 (948)
1918-19	76 (362)	1,477·2 (546)	275·5 (710)	40 (727)	839·9 (954)
1919-20	76 (362)	1,563·5 (579)	280·4 (723)	41·0 (745)	856·3 (473)
1920-21	77 (367)	1,923·5 (712)	288·4 (758)	41·6 (745)	869·9 (908
1921-22	81 (386)	2,122·4 (784)	288·4 (743)	43·0 (782)	908·3 (1,032)
1922-23	86	2,324·7 (859)	321·2 (828)	47·5 (863)	1,003·1 (1,140)
1923-24	89	2,685·8 (992)	330·4 (851)	49·0 (891)	1,043·4 (1,185)
1924-25	90	2,213·3 (818)	341·7 (881)	50·3 (914)	1,067·6 (1,213)
1925-26	90	2,134·7 (788)	331·3 (854)	50·5 (918)	1,063·7 (1,209)

The production of the mills has increased to a still greater extent. The following figures show the exports of jute manufactures and the declared values for the same periods. The value of jute manufactures exported by sea in 1924-25 was over thirty-three times as great as the average value of the export in the period 1879-80 to 1883-84 :—

—	Jute manufactures. Gunny bags in millions of number.	Gunny cloths in millions of yards.	Value in lakhs of Rs.
1879-80 to 1883-84	54·9 (100)	4·4 (100)	124·9 (100)
1884-85 to 1888-89	77 (140)	15·4 (350)	162·9 (130)
1889-90 to 1893-94	111·5 (203)	41 (932)	289·3 (232)
1894-95 to 1898-99	171·2 (312)	182 (4,136)	518 (415)
1899-1900 to 1903-04	206·5 (376)	427·2 (9,709)	826·5 (662)
1904-05 to 1908-09	257·8 (469)	698 (15,864)	1,442·7 (1,154)
1909-10 to 1913-14	339·1 (618)	970 (2,045)	2,024·8 (1,621)
1914-15 to 1918-19	667·6 (1,216)	1,156 (26,273)	4,019·3 (3,218)
1919-20	342·7 (624)	1,275·1 (28,980)	5,001·5 (4,004)
1920-21	533·9 (987)	1,352·7 (33,800)	5,299·4 (4,273)
1921-22	396·7 (715)	1,120·5 (28,000)	2,999·5 (2,419)
1922-23	344·2 (637)	1,254·3 (31,350)	4,049·4 (3,265)
1923-24	413·7 (752)	1,348·7 (30,652)	4,228·3 (3,382)
1924-25	425·1 (774)	1,456·2 (33,095)	5,148·8 (4,122)
1925-26	425·0 (774)	1,461·3 (33,211)	5,752·1 (4,605)
1926-27	449·0 (818)	1,503·1 (34,161)	5,283·3 (4,222)
1927-28	463·1 (843)	1,552.7 (35,289)	5,330·9 (4,268)

Until the outbreak of war the exports by sea of raw jute were marked by increases from year to year, although the increase was very much less than that in the case of manufactures. During the war years exports declined very considerably. The cessation of the war stimulated the export trade and in 1919-20, the exports showed an increase, as compared with the average of the war quinquennium (1914-15 to 1918-19). In the following two years, the exports recorded a decrease and in 1922-23 they again made a recovery and amounted to 578,000 tons:

		Jute, raw, ton.	
Average	1879-80 to 1883-84..	375,000	(100)
,,	1884-85 to 1888-89..	445,000	(119)
,,	1889-90 to 1893-94..	500,000	(133)
,,	1894-95 to 1898-99..	615,000	(164)
,,	1899-1900 to 1903-04	635,000	(169)
,,	1904-05 to 1908-09..	755,000	(201)
,,	1909-10 to 1913-14..	765,000	(204)
,,	1914-15 to 1918-19..	464,000	(124)
Year	1919-20	592,000	(158)
,,	1920-21	472,000	(129)
,,	1921-22	468,000	(125)
,,	1922-23	578,000	(154)
,,	1923-24 ..	660,000	(176)
,,	1924-25	696,000	(185)
,,	1925-26	647,000	(172)
,,	1926-27	708,000	(189)
,,	1927-28	892,000	(238)

The total quantity of jute manufactures exported by sea from Calcutta during the year 1922-23 was 668,000 tons as against 639,000 tons in the preceding year and 603,500 tons in the pre-war year 1913-14. The values of these exports amounted to Rs. 40·28 lakhs, or an increase of Rs. 10,36 lakhs over the preceding year and Rs. 12,08 lakhs over the pre-war year. The shipments of gunny bags were valued at Rs. 15,82 lakhs and of gunny cloth Rs. 24.24 lakhs as against Rs. 13,86 and Rs. 15,92 lakhs respectively in the preceding year and Rs. 12,48 and Rs. 15,58 lakhs in the pre-war year.

The price of raw jute reached a very high point in 1906-07, the rate being Rs. 65 per bale; in 1907-08 it dropped to Rs. 42 per bale, and the fall was accentuated in 1908-09 and 1909-10, the price having declined to 36·4 and Rs. 31, in 1917-18 it dropped to Rs. 38-8-0 but rose again in 1919-20 up to Rs. 77-8-0. In 1920-21 it dropped to Rs. 65, but rose again to Rs. 86. It again declined to Rs. 66. In 1921-22 the price rose to Rs. 73 at the end of September, but fell back again to Rs. 50 at the end of November and recovered at Rs. 64 at the close of the year.

	Average price of jute, ordinary, per bale of 400 lbs. Rs.	a.	p.	
1879-80 to 1883-84	23	8	0	(100)
1884-85 to 1888-89	23	3	2	(99)
1889-90 to 1893-94	32	6	5	(138)
1894-95 to 1898-99	30	12	0	(131)
1899-1900 to 1903-04 ..	32	1	7	(137)
1904-05 to 1908-09	44	13	6	(191)
1909-10 to 1913-14	51	0	10	(217)
1914-15 to 1918-19	50	6	5	(214)
1917-18	38	8	0	(164)
1918-19	60	0	0	(255)
1919-20	77	8	0	(330)
1920-21	69	8	0	(296)
1921-22	63	0	0	(268)
1922-23	73	0	0	(310)
1923-24	55	0	0	(234)
1924-25	89	0	0	(379)
1925-26	124	2	10	(528)
1926-27	83	5	9	(353)
1927-28	73	8	4	(313)

The average **prices of gunny cloth** have been as follows:—

	Price of Hessian cloth 10½oz. 40″ per 100 yds. Rs.	a.	p.	
1879-80 to 1883-84	10	7	11	(100)
1884-85 to 1888-89	8	0	7	(77)
1889-90 to 1893-94	10	6	6	(98)
1894-95 to 1898-99	9	11	8	(98)
1899-1900 to 1903-04 ..	10	2	10	(97)
1904-05 to 1908-09	11	14	1	(112)
1909-10 to 1913-14	12	12	2	(122)
1914-15 to 1918-19	23	5	7	(222)
1917-18..	33	8	0	(314)
1918-19..	33	0	0	(314)
1919-20..	28	0	0	(267)
1920-21..	20	8	0	(196)
1921-22..	14	8	0	(138)
1922-23..	21	12	0	(209)
1923-24..	19	13	0	(190)
1924-25..	22	9	0	(214)
1925-26..	24	3	0	(228)
1926-27..	19	9	0	(186)
1927-28..	21	13	3	(208)

The 1926 crop.—The final figures of outturn for the three provinces work out as follows:—

Province.	Bales. 1927.	1926.*
Bengal (including Cooch Behar & Tripura States)	9,054,700	10,769,200
Bihar and Orissa	† 717,000	† 819,300
Assam	458,000	599,000
Total ..	10,229,700	12,187,500

Province.	Area in Acres. 1927.	1926.*
Bengal (including Cooch Behar & Tripura States)	2,962,100	3,363,900
Bihar and Orissa (including Nepal)	241,000	297,000
Assam	168,000	186,000
Total ..	3,371,100	3,846,9[illegible]

* Revised. † Including Nepal.

The Indian Jute Mills Association now one of the most important, if not the most important, of the bodies affiliated to the Bengal Chamber of Commerce, was started under the following circumstances:—In 1886 the existing mills, finding that, in spite of the constant opening up of new markets, working results were not favourable, came to an agreement, with the late S. E. J. Clarke, Secretary to the Chamber of Commerce, as trustee, to work short time. The only mills which stood out of this arrangement were the Hooghly and Serajgunge. The first agreement, for six months dating from 15th February 1886, was subsequently renewed at intervals without a break for five years up to February 15, 1891. The state of the market at the time of the renewals dictated the extent of the short time, which varied throughout the five years between 4 days a week, 9 days a fortnight and 5 days a week. Besides short time, 10 per cent. of the sacking looms were shut down for a short period in 1890. An important feature of this agreement was a mutual undertaking by the parties not to increase their spinning power during the currency of the agreement, only a few exceptions being made in the case of a few incomplete new mills.

The present officials of the Association are:—

Chairman.—Mr. E. G. Abbott, M.L.C.

Members of Committee.—Mr. T. Douglas, Mr. D. J. Leckie, Mr. G. A. Mason, and Mr. M. P. Thomas.

Working days.—With the introduction of the electric light into the mills in 1896, the working day was increased to 15 hours, Saturdays included, which involved an additional amount of cleaning and repairing work on Sundays. In order to minimise this Sunday work and give them a free Sunday, an agitation was got up in 1897 by the Mill European assistants to have the engines stopped at 2 or 3 p.m. on Saturdays. The local Government took the matter up, but their action went no further than applying moral suasion, backed by a somewhat half-hearted threat. The Mill Association held meetings to consider the question and the members were practically agreed as to the utility of early closing on Saturdays, but, *more suo*, could not trust themselves to carry it out without legislation. Unfortunately the Government of India refused to sanction the passing of a Resolution by the provincial Government under the Factory Act and the matter was dropped. Only a year or two ago the Jute Mills Association in despair brought out an American business expert, Mr. J. H. Parks, to advise them on the possibility of forming a jute trust with a view to exercising some control over the production and price of jute. Mr. Parks came, and wrote a report which the Association promptly pigeon-holed because the slump was over and the demand was so prodigious that there was no need to worry about the price of jute.

An Association, styled the **Calcutta Jute Dealers Association,** has been formed in Calcutta to promote and to guard the common interests of its members as dealers in jute for local consumption. The members are balers and brokers of jute for sale to the jute mill in and around Calcutta. The present Committee:—Mr. Geo. Morgan, M.L.C., *Chairman.* Members:—Messrs. E. W. Christie, D. King, H. F. Mytton, A. C. Robertson, and R. G. Tarbat.

Effects of the War.—The official review of the Trade of India in 1916-17 says:—The value of the exports of raw jute increased in 1916-17 by nearly Rs. 65 lakhs to Rs. 1,629 lakhs. The quantity exported, however, was less than in the preceding year. The estimated yield of the crop was 12 per cent. above that of the previous year, *viz.*, 1,490,000 tons or 8,340,000 bales. Owing to the lack of tonnage and other abnormal circumstances brought about by the war, the quantity exported was 10 per cent. below that of the previous year. Of the consumers the United Kingdom and Italy took less, while the United States, France (mainly *via* Dunkirk), Russia (*via* Vladivostok) and Brazil took greater quantities. There were, of course, no exports to enemy countries which took more than 27 per cent. in the five years ending 1913-14, the pre-war year. The increase in the value accompanied by a decrease in the volume of exports was due to the very high range of prices during the months of September, October, November and December. Towards the close of the year under review prices steadily declined, and have since gone still lower.

Jute Manufactures.—The value of the exports now approximates to Rs. 42 crores. In spite of the war with its attendant difficulties of freight and finance, the exports of gunny cloth showed an increase of Rs. 241 lakhs of which Rs. 163 lakhs were due to higher prices and Rs. 78 lakhs to an increase in the volume of exports. There were also an increase of Rs. 118 lakhs in the value of gunny bags exported. The number of bags shipped increased while the weight decreased, sand bags for war purposes being lighter than the ordinary bags for transporting grain. Exports to Australia in 1916-17 were a record. The United Kingdom with Australia took more than half of the number of bags exported while the United States took more than half of the quantity of cloth exported.

There were 74 mills at work throughout the year with 41,292 looms and 863,339 spindles. The number of persons employed was 285,881. There were no difficulties as regards the supply of labour.

The number of gunny bags shipped from Calcutta during 1922-23 declined from 386 million bags to 342 million bags, but the value increased from Rs. 13,87 lakhs to Rs. 15,82 lakhs. Shipments of gunny cloth rose from 1,120 million yards to 1,251 million yards valued at Rs. 15,92 lakhs and Rs. 24,24 lakhs respectively.

Hemp and Jute Substitutes.

Experiments have been made during the last few years by the Agricultural Department of the Government of India with the **Deccan hemp** plant (*Hibiscus cannabinus*), which yields a fibre very similar to jute. As a result, a new variety of the plant, known as Type 3, has been obtained, which it is now proposed to introduce into several parts of India, and, as a beginning, the variety is to be grown on a number of estates in Bihar. A sample of the fibre prepared from this variety by the usual methods of retting was 10 ft. to 12 ft. long, of an exceptionally light colour, well cleaned, and of good strength

It was valued at £18 per ton with Bimlipatam jute at £12 10s., and Bengal first mark jute at £17 per ton. Deccan hemp has been grown fairly extensively in Bombay, the Central Provinces, and Madras, where it is used for ropes and cordage and also for the manufacture of a coarse sackcloth. A valuable feature of the plant is its suitability for cultivation in such parts of India as are not suitable for jute.

Prior to the war, the United Kingdom's requirements of hemp were mainly supplied by the following countries in order of importance:—the Philippine Islands, New Zealand, India, Russia, Italy and Germany. The opinion appears to be held that the effect of the war will be to cause very considerable changes in the character of the fibre market. There will probably be labour difficulties, it is thought, in the preparation of the hemp crops of Russia and Hungary and it is not unlikely that the world will look to countries such as India for the supply of fibres which may be used as substitutes for the European varieties of hemp. There can be no doubt that one of the early effects of the war was to firm up hemp prices. As far as Indian hemp is concerned, values were persistently depreciated during the first six months of 1914 owing to large stocks held; but the closure of the Russian hemp market on the outbreak of war resulted in a marked improvement in values, and there was a keen demand and a considerable rise in price. Exports from Calcutta during 1922-23 made a great recovery from the previous year. The quantity advanced by 37 per cent. from 197,412 cwts. to 269,487 cwts. and the value from Rs. 26·93 lakhs to Rs. 36·68 lakhs.

THE WOOL INDUSTRY.

Wool exported from India consists not only of wool grown in India itself, but of imports from foreign sources, these latter coming into India both by land and by sea. Imports by sea come chiefly from Persia, but a certain quantity from Persia also comes by land, while the main imports are from Afghanistan, Central Asia, Tibet and Nepal. Quetta, Shikarpur, Amritsar and Multan are the main collecting centres for wool received by land from Afghanistan and Persia, whence it is almost invariably railed to Karachi for subsequent export overseas.

Imports and Exports.—A considerable amount of wool is imported annually from Tibet, and in normal years, from Afghanistan Imports of raw wool advanced from nearly 5 million lbs. valued at Rs. 32 lakhs in 1926-27 to 5.8 million lbs. valued at Rs. 45 lakhs in 1927-28. The trade in raw wool continued to expand exports rising from 45 million lbs. to 59 million lbs. in quantity and from Rs. 3,93 lakhs to Rs. 4,36 lakhs in value.

Production in India.—The production of wool in India is estimated at 60 million lbs. the estimate being arrived at from the available figures of the number of sheep in the country and their estimated yield per fleece, the average quantity of wool yielded per sheep per annum being taken at only 2 lbs.

All Indian wools are classed in the grade of **carpet wools,** and it is correct to say of perhaps fully half the breeds of sheep found on the plains of India that they yield a kind of hair rather than of wool. They are reared chiefly on account of the mutton, and the fleece has been generally regarded as of subsidiary interest. In many respects, in actual fact, the Indian plains sheep approximate more nearly to the accepted type of the goat rather than of the sheep. Short remarks in his manual on Indian cattle and sheep, particularly with respect to the Madras type, that they "resemble a greyhound with tucked up belly, having some coarseness of form, the feet light, the limbs bony, sides flat and the tail short."

Mill manufacture.—The number of woollen mills at work in British India in 1902 was three, with an authorised capital of Rs. 38.50,000, and employing 23,800 spindles and 624 looms. The number of persons employed in the industry then was 2,559, and the quantity of woollen goods produced 2,148,000, lbs. At the end of 1917 the number of mills had risen to five, with an authorised capital of Rs. 2,56,50,000 employing 39,608 spindles and 1,155 looms. The weight of goods produced then was 9,744,264 lbs. and the number of persons employed 7,824. With regard to Indian States, there was one mill in Mysore in 1903 with a capital of Rs. 6,00,000, employing 1,430 spindles and 45 looms. The quantity of goods produced was 1,136,000 lbs. and the number of persons employed 297. In 1907 there was still only the one mill working in an Indian State—the authorised capital had been increased to Rs. 15,00,000, the quantity of goods produced to 1,724,087 lbs., and the number of persons employed to 563. Three of the mills manufacture all classes of woollen and worsted goods, the remainder manufacturing blankets only. The existence of these mills in India proved of great service to Government in the meeting of war requirements, and they were all employed to their fullest capacity in supplying army demands for greatcoat cloth, serges, putties, flannels, blankets and hosiery. Their total capacity, however, was not sufficient to meet the full requirements of the army, and consequently their supplies had to be supplemented by large imports from home. The bulk of the wool used by the Indian mills is Indian wool, although it is supplemented to some extent by the importation of merinos and cross-breds from Australia for the manufacture of the finer classes of goods. Their market for manufactured goods is almost entirely in India itself.

Blanket weaving and carpet manufacture are carried on in various parts of the country, notably in the Punjab and the United Provinces. Woollen pile carpets are made in many of the jails. Amritsar had a considerable trade at one time in weaving shawls from *pashm,* the fine under fleece of the Tibetan goat, but its place has been taken to some degree by the manufacture of shawls from imported worsted yarns, but more generally by the manufacture of carpets of a fine quality which find a ready sale in the world market. This work is done entirely on hand looms and the carpets fetch a high price.

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Silk.

In the early days of the East India Company the Indian Silk trade prospered greatly, and various sub-tropical races of the Silkworm were introduced. But the trade gradually declined for the following reasons:—

In the seventeenth and eighteenth centuries India's chief competior in the silk trade was the Levant Company. Successful efforts, however, were made to acclimatise in Europe one or two races of a temperate worm, procured from China and Japan. When sericulture became part of the agriculture of France and Italy, a quality of silk was produced entirely different from that of India and Turkey, and its appearance created a new demand and organized new markets.

All subsequent experience seems to have established the belief that the plains of India, or at all events of Bengal, are never likely to produce silk that could compete with this new industry. On the lower hills of Northern India, on the other hand, a fair amount of success has been attained with this (to India) new worm, as, for example, in Dehra Dun and Kashmir. In Manipur, it would appear probable that *Bombyx mori*, possibly obtained from China, has been reared for centuries. The caprice of fashion has, from time to time, powerfully modified the Indian silk trade. The special properties of the *korah* silk were formerly much appreciated but the demand for them has now declined. This circumstance, together with defective systems of rearing and of hand-reeling and weaving, accounts largely for the present depression in the mulberry silk trade of India.

Mulberry-feeding worms.—Sir George Watt states that in no other country does the necessity exist so pressingly as in India to treat the subject of silk and the silk industries under two sections, *viz.*, Bombycidae, the domesticated or mulberry-feeding silk worms; and Saturniidae, the wild or non-mulberry-feeding worms. In India the mulberry worm (*Bombyx Mori*) has been systematically reared for many centuries, there being six chief forms of it. In the temperate tracts of India various forms of *Morus alba*, (the mulberry of the European silk-producing countries), are grown specially as food for the silkworm. This is the case in many parts of the plains of Northern India, Baluchistan, Afghanistan, Kashmir, and along the Himalaya at altitudes up to 11,000 feet. The other species even more largely grown for the Indian silkworm is *M. Indica* of which there are many distinctive varieties or races. This is the most common mulberry of Bengal and Assam as also of the Nilgiri hills.

India has three well-known purely indigenous silkworms; the *tasar*, the *muga* and the *eri*. The first is widely distributed on the lower hills, more especially these of the great central tableland, and feeds on several jungle trees. The second is confined to Assam and Eastern Bengal, and feeds on a laurel. The third exists in a state of semi-domestication, being reared on the castor-oil plant. From an art point of view the *muga* silk is the most interesting and attractive, and the cocoon can be reeled readily. The *eri* silk, on the other hand, is so extremely difficult to reel that it is nearly always carded and spun—an art which was practised in the Khasi Hills of Assam long before it was thought of in Europe.

Experiments and results.—Numerous experiments have been made with a view to improving sericulture in India. French and other experts are agreed that one of the causes of the decline of the silk industry in India has been the prevalence of diseases and parasites among the worms, the most prevalent disease being pebrine. M. Lafont, who has conducted experiments in cross breeding, believes that improvement in the crops will be obtained as soon as the fight against pebrine and other diseases of the worms is taken up vigorously by the producers of seed and the rearers of worms, while improvement in the quality of the cocoons will be obtained by rearing various races, pure and cross breds.

In Kashmir and Mysore satisfactory results have been obtained. In the former State sericulture has been fostered on approved European principles with Italian reeling machinery, seed being imported annually on a large scale. In 1897 in Mysore Mr. Tata, after selecting a plantation and site for rearing houses, sent to Japan for a Superintendent and trained operatives. The Mysore authorities have made a grant of Rs. 3,000 a year to the Tata farm in return for instruction given to the people of Mysore in Japanese methods of growing the mulberry and rearing the insects. The products of the Mysore State are exported to foreign countries from Madras. The work of the Salvation Army is also noteworthy in various parts of India. They have furnished experts, encouraged the planting of mulberry trees, and subsidised several silk schools. The draft prospectus has been issued of a silk farm and institute to be started at Simla under the auspices of the Salvation Army. The Lieut.-Governor of the Punjab has permitted the school to be called after his name, and the Punjab Government made a grant of Rs. 2,000 towards the expenses. Sir Dorabji Tata has also made a donation of Rs. 1,000. The Bengal Silk Committee under the guidance of some French experts have conducted cross-breeding experiments with a view to establish a multi-voltine hybrid of European quality. There is a Government sericultural farm at Berhampore, where, it is said, a pure white multi-voltine of silk worm is reared. The results of the Bengal Committee's labours may be summed up as follows: the only really effective method of dealing with the problem is to work up gradually to a point at which the whole of the seed cocoon necessary for the province will be supplied to rearers under Government supervision, and to establish gradually a sufficient number of large nurseries throughout the silk districts of the province.

In 1915 there was issued by the Agricultural Research Institute, Pusa, a *Bulletin* (No. 48 of 1915) entitled "First Report on the Experiments carried out at Pusa to improve the Mulberry Silk Industry." In a short Prefatory note

Mr. Bainbrigge Fletcher (Imperial Entomologist) explains that the object of the Bulletin is to place on record some of the more important experiments which were commenced at Pusa, in the year 1910 and have since been carried on in the endeavour to fix a superior multivoltine race of the Mulberry Silkworm which would not degenerate and which would yield silk better both in quality and outturn than that supplied by the multivoltine races which are reared at present.

Central Nurseries.—The report of the Agricultural Department, Bengal, for the year ending June 30, 1913, gives an account of a scheme which has been devised with the object of reclaiming the silk industry. The aim of the scheme is gradually to establish throughout the silk districts a sufficient number of central nurseries with rearing houses and thus enable the whole of the seed cocoons required in the province to be supplied under Government supervision. It is believed that this is the only really effective method of dealing with the problem. A number of the existing smaller nurseries were closed during 1913 and others are being converted into enlarged and improved central nurseries with rearing houses complete. The ultimate success of the scheme depends largely on the willingness of the rearers to pay an adequate price for pure seed.

A pamphlet was published in 1915, by Mr. M. N. De, Sericultural Assistant at Pusa, which contains practical hints on improved methods which are recommended to be used for reeling mulberry silk in Bengal and other silk producing districts. It has been found that, by the provision of two small pulleys to the ordinary Bengal type of reeling machine, superior thread can be obtained, the cost of the extra apparatus is merely nominal (five or six annas per machine) whilst the suitability of the machine for cottage workers is maintained. By attention to such simple points as the stifling and storage of cocoons and the temperature and quality of the water used in the reeling pans, great improvements can be effected in most silk centres in Bengal and other districts.

Exports of Silk.—As a result of the war the trade has shown in some degree signs of revival from its decadent condition, both as regards its volume and value. The value of exports during 1915-16 improved by Rs. 12 lakhs to Rs. 27½ lakhs, of which raw silk accounted for Rs. 24 lakhs. In 1916-17 the total exports rose to Rs. 54¾ lakhs. In 1926-27 exports of raw silk amounted to Rs. 32 lakhs and of silk manufactures nearly Rs. 3 lakhs.

Indigo.

Indigo dyes are obtained from the Indigofera a genus of Leguminosae which comprises some 300 species, istributed throughout the tropical and warm temperate regions of the globe, India having about 40. Western India may be described as the headquarters of the species, so far as India is concerned, 25 being peculia to that Presidency. On the eastern side of India, in Bihar, Bengal, Assam and Burma, there is a marked decrease in the number of species but a visible increase in the prevalence of those that are met with.

There is evidence that when Europeans first began to export the dye from India, it was procured from the Western Presidency and shipped from Surat. It was carried by the Portuguese to Lisbon and sold by them to the dyers of Holland, and it was the desire to obtain a more amyle supply of dye stuff that led to the formation of the Dutch East India Company and so to the overthrow of the Portuguese supremacy in the East. Opposition to indigo in 17th century Europe was keen owing to its interference with the wood industry, but it was competition to obtain indigo from other sources than India that led on the first decline of the Indian indigo industry. In the middle of the eighteenth century, when the cultivation of indigo in the West Indies had been given up—partly on account of the high duties imposed upon it and partly because sugar and coffee were found to be more profitable—the industry was revived in India, and, as one of the many surprises of the industry, the province of Bengal was selected for this revival. It had no sooner been organised, however, than troubles next arose in Bengal itself through misunderstandings between the planters, their cultivators and the Government, which may be said to have culminated in Lord Macaulay's famous *Memorandum* of 1837. This led to another migration of the industry from Lower and Eastern Bengal to Tirhut and the United Provinces. Here the troubles of the industry did not end, for the researches of the chemical laboratories of Germany threatened the very existence of any natural vegetable dye. They first killed the maddar dye of Europe, then the safflower, the lac and the *al* dyes of India, and are now advancing rapidly with synthetic indigo, intent on the complete annihilation of the natural dye. Opinions differ on many aspects of the present vicissitude; meantime the exports from India have seriously declined, and salvation admittedly lies in the path of cheaper production both in cultivation and manufacture. These issues are being vigorously faced and some progress has been accomplished, but the future of the industry can scarcely help being described as of great uncertainty. The issue is not the advantage of new regulations of land tenure, but one exclusively of natural *versus* synthetic indigo. (See Watt's "Commercial products of India.") In this connection it ma be noted that increases in the price of coal in England, due to labour difficulties, have greatly strengthened the position of natural indigo. In February 1915 a conference was held at Delhi when the possibility of assisting the **natural indigo industry** was considered from three points of viw—agricultural, research and commercial. The agricultural or botanical side of the question is fully discussed by Mr. and Mrs. Howard of Pusa in Bulletins Nos. 51 and 54 of

the Agricultural Research Institute. Other aspects of the question were fully examined last year in the Agricultural Journal of India by Mr. W. A. Davis, Indigo Research Chemist to the Government of India. An **Indigo Cess Bill** was passed in the Imperial Legislative Council in 1918. It provides for a cess on indigo exported from India for the scientific investigation of the methods of cultivation and manufacture of indigo, the proceeds of the cess being received and expended by Government.

Decline of the Industry.—Since synthetic indigo was put upon the market, in 1897, the natural indigo industry of India has declined very rapidly; apart from slight recoveries in 1906-07 and 1911-12, the decline continued without a break until the revival due to the impossibility of obtaining artificial dyes in sufficient quantities during the war.

In 1926-27 the total yield of indigo was estimated at 20,100 cwts. on an area of 100,400 acres. The exports (1600 cwts.) were valued at Rs. 4½ lakhs.

OILS AND OIL CAKES.

In 1927-28 Oilseeds occupied the fifth place among exports the first four being raw and manufactured jute, cotton food-grains and tea. Indian supplies were moderately satisfactory and in the case of groundnuts plentiful, while demand improved considerably. The total exports amounted to 1,210,000 tons valued at Rs. 26,69 lakhs showing an increase of 44 per cent in quantity and 40 per cent in value over the preceding year's figures. Compared with the pre-war average there was however a decrease of 17 per cent in quantity but an increase of 9 per cent in value.

The following table shows the quantities of the principal seeds exported during the past three years and the pre-war quinquennium :—

	Pre-war average	1825-26	1826-27	1927-28
	(Thousands of Tons)			
Linseed	379	308	192	222
Rape seed	273	112	94	66
Groundnuts ..	212	455	368	613
Castor	114	110	102	122
Cotton	240	197	51	153
Sesamum	119	40	2	11
Copra	31	..	2	..
Others	85	28	27	23
Total ..	1,453	1,250	838	1,210

A pamphlet on the subject recently publihsed by the Commercial Intelligence Department points out that it is both economically and industrially unsound for India to export her oil seeds instead of manufacturing the oils and oil cakes in India. It allows other countries to reap the manufacturers' profits and at the same time deprives Indian agriculture of the great potential wealth, as cattle-food and manure, contained in the oil cakes. An immense quantity of oil is, as a matter of fact, already manufactured in this country by more or less crude processes. Village oil mills worked by bullocks and presses worked by hand exist in all parts of the country and supply most of the local demand for oil. There has also been a great increase in recent years in the number of oil mills worked by steam or other mechanical power. These crush all the commoner oil seeds and development has been especially marked in the case of mustard oil, castor oil and groundnut oil. In spite of all this there has been a perceptible diminution in the export of oil from India, particularly of cocoanut oil and linseed oil, and an increase in the export of oil seeds, which is particularly marked in the case of copra and groundnuts. The situation created by the War has naturally led to too much discussion of the possibility of developing on a large scale the existing oil-milling industry in India.

There are three difficulties with which any proposal to develop in India an **oil-milling industry** on a great scale is faced. In the first place, there exist high protective tariffs in European countries which encourage the export from India of the raw material rather than the manufactured product. Secondly, there is a better market for the oil cake in Europe than in India and the freight on oil seeds is less than the freight on cake. Thirdly, it is much easier and less expensive to transport oil seeds by sea than it is to transport oil. While this has been the position in the European markets, Indian made oils, other than cocoanut oil, have made enough headway in Eastern markets to suggest the possibility of a development of those markets.

The problem of finding a market for **oil cakes** is equally important. The value of oil cakes is much better appreciated in Europe than in India. The Indian cultivator is prejudiced against the use of machine-made cake as a cattle food or as manure because he considers that it contains less oil and therefore less nourishment than the village-made cake. He is therefore unwilling to buy it except at a reduced price. His prejudices on this point have no justification in fact since experts are agreed that mill cake is a better food for cattle than village-made cake. Even when the mill cake contains less oil than the village cake, there is still more oil in the cake than cattle can digest. The excess of oil in the village cake, where it exists, is a drawback and not an advantage to the use of the cake as food. A considerable amount of demonstration work has been done by the Agricultural Departments of Government in order to remove the cultivator's prejudices and there is said now to be an increasing demand for most classes of mill cake.

Tea.

Tea cultivation in India is chiefly in Assam, Bengal and Southern India, the cultivation elsewhere being comparatively unimportant.

The total production of tea in India was estimated at 391 million lbs. in 1927, as compared with 393 million lbs. in 1926 and 364 million lbs. in 1925. Assam contributed 60 per cent., Northern India (excluding Assam) 26 per cent. and Southern India 14 per cent, the same as in the preceding year. The statement below shows the development of the industry during the past years.

——	1923	1924	1925	1926	1927
ACREAGE.	Acres.	Acres.	Acres.	Acres.	Acres.
Assam	411,900	413,300	416,500	420,400	423,800
Rest of Northern India ..	203,500	204,400	211,200	212,700	214,500
Southern India	95,800	97,000	100,000	106,300	114,600
Total ..	711,200	714,700	727,700	739,400	752,900
PRODUCTION.	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)
Assam	237,601	237,153	225,185	241,982	235,888
Rest of Northern India ..	92,076	91,351	89,017	99,804	101,923
Southern India	45,679	46,752	49,305	51,1[illegible]7	53,109
Total ..	375,356	375,256	363,507	392,933	390,920

Exports during the same years were as follows :—

Exports of tea by sea to foreign countries.

——	1923-24	1924-25	1925-26	1926-27	1927-28
	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)
From Northern India (Calcutta and Chittagong) ..	296,778	299,747	280,024	304,957	315,109
From Southern India (Madras ports)	38,560	37,717	43,945	44,172	46,142
From Bombay, Sind and Burma	3,417	2,643	2,576	1,373	761
Total	338,755	340,107	326,5[illegible]5	350,502	362,012

Exports during 1927-28 increased by 3 per cent. in quantity and 10 per cent. in value as compared with the exports in 1926-27, and amounted to 362 million lbs. valued at Rs. 32 crores, as compared with 350 million lbs. valued at Rs. 29 crores in the preceding year. The United Kingdom took 306 million lbs. of black tea, valued at Rs. 28½ crores as against 290 million lbs. valued at Rs. 24½ crores in the previous year. She also took 943,500 lbs. green tea, as compared with 1,220,000 lbs. in 1926-27. About 85 per cent. of the exports went to the United Kingdom, whereas in 1926-27 her share had been nearly 84 per cent. The re-exports of Indian tea from the United Kingdom also increased in 1927-28 to 48 million lbs. from 43 million lbs. in 1926-27, of which 17 million lbs. were shipped to the Irish Free State, 20 million lbs. to the Continent of Europe, 5 million lbs. to the United States and 4 million lbs. to Canada. Australia's demands for Indian tea decreased from 9 to 3 million lbs. and the exports to Iraq from 4 to 2 million lbs., to Ceylon, from 4,427,000 lbs. to 4,716,000 lbs. Persia took 4 million lbs. as compared with 6 million lbs. in the preceding year, while sales to Russia were 6 million lbs. as compared with only 101,000 lbs. in the previous year.

EXPORTS AND PRICES.

The following table shows the quantity of Tea exported by sea and by land to Foreign Countries from India, Ceylon, China and Java in the years 1898-99 to 1927-28 with variations in index numbers, taking the figure of 1896-97 as 100‡:—

—	India §	Ceylon.*	China.† Black and green.	China.† Brick, table and dust.	Java.†
	lbs.	lbs.	lbs.	lbs.	lbs.
1899-1900	177,163,999 [118]	129,661,908 [118]	153,669,067 [95]	71,205,067 [91]	....
1900-01	192,300,658 [128]	149,264,603 [136]	144,270,933 [90]	52,190,667 [66]	....
1901-02	182,594,356 [121]	144,275,608 [131]	119,390,000 [74]	42,740,533 [54]	....
1902-03	183,710,931 [122]	150,829,707 [137]	128,226,933 [79]	78,512,400 [100]	....
1903-04	209,552,150 [139]	149,227,236 [135]	140,607,867 [88]	83,813,600 [107]	....
1904-05	214,300,325 [142]	157,929,333 [143]	132,366,933 [83]	61,493,733 [78]	....
1905-06	216,770,366 [144]	171,256,703 [156]	112,152,533 [69]	70,784,267 [91]	25,650,156 [100]
1906-07	236,090,328 [157]	171,558,110 [156]	108,864,534 [67]	79,506,133 [101]	27,455,019 [107]
1907-08	228,187,826 [151]	181,126,298 [164]	130,022,266 [80]	84,940,000 [108]	29,286,402 [114]
1908-09	235,089,126 [156]	181,436,718 [165]	129,265,733 [80]	80,885,733 [103]	36,579,941 [143]
1909-10	250,521,064 [167]	189,585,924 [172]	120,174,800 [74]	79,617,600 [101]	36,679,003 [143]
1910-11	256,438,614 [170]	186,925,117 [170]	123,947,734 [77]	84,158,943 [107]	40,639,185 [158]
1911-12	263,515,774 [175]	184,720,534 [168]	137,788,933 [85]	57,251,467 [73]	50,362,607 [196]
1912-13	281,815,329 [187]	196,632,380 [169]	127,826,800 [79]	69,733,200 [89]	61,691,452 [241]
1913-14	291,715,041 [194]	197,419,430 [179]	109,259,733 [68]	82,274,400 [105]	64,938,907 [253]
1914-15	302,556,697 [201]	191,833,946 [174]	117,337,867 [72]	81,125,333 [103]	71,322,504 [278]
1915-16	340,433,163 [226]	214,900,383 [195]	143,662,000 [89]	93,776,667 [119]	101,603,335 [396]
1916-17	292,594,026 [194]	208,090,279 [189]	126,260,800 [78]	79,259,733 [101]	98,006,121 [382]
1917-18	360,631,933 [240]	195,231,592 [177]	89,115,333 [55]	60,936,666 [78]	80,236,200 [313]
1918-19	326,645,780 [217]	180,817,744 [164]	43,422,933 [27]	10,445,866 [13]	61,853,000 [241]
1919-20	382,033,694 [254]	208,560,943 [189]	71,801,200 [44]	20,182,400 [26]	110,792,430 [432]
1920-21	287,524,697 [191]	184,770,231 [168]	38,908,800 [24]	1,809,867 [2]	93,680,400 [365]
1921-22	317,566,850 [211]	161,610,966 [147]	53,892,533 [33]	3,158,533 [4]	67,775,200 [264]
1922-23	294,700,469 [196]	171,807,581 [156]	73,336,933 [45]	3,472,800 [4]	80,860,300 [315]
1923-24	344,774,111 [229]	181,939,731 [165]	98,012,133 [61]	8,813,467 [11]	90,302,300 [352]
1924-25	348,476,011 [232]	204,931,217 [186]	91,345,333 [56]	10,779,333 [16]	105,113,200 [410]
1925-26	337,314,872 [224]	209,791,384 [191]	88,019,600 [54]	23,048,133 [29]	94,774,200 [369]
1926-27	362,880,932 [241]	217,183,666 [197]	82,896,500 [51]	29,012,400 [37]	118,928,400 [464]
1927-28	370,903,804 [247]	227,037,856 [206]	77,809,900 [48]	38,630,300 [49]	126,905,700 [495]

* The figures for years previous to 1905-06 and also from 1917-18 to 1927-28 relate to the calendar year.
† For calendar year.
‡ In the case of Java the figure for 1905-06 has been taken as 100, earlier figures not being available.
§ Figures for 1925-26 and 1926-27 include those of railborne trade at stations adjacent to land frontier routes.

The following statement illustrates the variations in prices of Indian tea sold at auction sale in Calcutta and in average declared values of exports by sea in 1889-90 and the nine years ending 1927-28 the average price of 1901-02 to 1910-11 being taken as 100 in each case :—

Year.	Average price of Indian tea.		Average declared value of Exports by Sea.	
	Price.	Variation.	Price.	Variation.
	As. p.		As. p.	
1889-90	7 7	126	8 2	117
1919-20	8 0	133	8 8	124
1920-21	5 1	85	6 10	98
1921-22	10 1	168	9 3	132
1922-23	13 3	221	12 3	175
1923-24	15 0	250	14 11	213
1924-25	15 11	265	15 9	225
1925-26	13 5	224	13 4	190
1926-27	12 3	204	13 4	190
1727-28	14 10	247	14 4	205

Tea Cess Fund.—In 1903 an Act, known as the Indian Tea Cess Act, IX of 1903, was passed at the request of the trade for promoting its sale and manufacture. Under this Act a duty of ¼ pie per lb was levied on all Indian tea exported up to the 30th April, 1921. From 1st May, 1921, the rate was raised to ½ pie per lb., and from the 21st April, 1923, to 6 annas per 100 lbs. (¾ pie per lb). The whole of the amount collected is made over to a fund known as the Tea Cess Fund, which is placed at the disposal of a Committee appointed for the purpose, and Government merely acts as a revenue collecting agency. The total amount collected in 1927-28 was Rs. 13,75,000, as against Rs. 13,13,000 in 1926-27 and Rs. 12,29,000 in 1925-26.

Quantity of Indian Tea exported by sea* (distinguished according to countries of final destination) and by land, in the years 1922-23 to 1927-28.

——	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom ..	248,491,397	296,287,665	299,722,216	280,572,693	292,501,488	307,246,271
Rest of Europe ..	1,367,387	1,883,514	2,723,976	3,601,372	2,395,170	9,167,726
Africa	4,480,087	3,678,638	4,880,103	6,086,958	7,872,936	6,057,086
Canada	10,450,161	12,177,980	8,899,269	7,951,242	11,528,435	9,286,137
U. S. A.	4,342,551	5,869,215	6,209,245	4,902,025	7,619,555	8,798,827
Rest of America ..	1,415,794	1,393,919	1,126,336	1,746,008	1,425,556	1,209,304
Ceylon (*a*) ..	2,579,260	3,845,870	3,985,182	4,173,216	4,427,361	4,716,351
China	9,474	14,628	194,695	2,089,772	490,002	3,592,673
Persia	2,925,787	2,357,863	3,095,094	3,187,714	5,923,908	4,217,754
Turkey, Asiatic† ..	6,053,666	3,380,961	2,580,336	3,373,887	4,292,032	2,379,771
Rest of Asia ..	2,076,595	3,635,579	2,382,173	2,498,319	3,271,718	2,314,049
Australasia ..	4,433,706	4,772,039	5,105,514	6,361,970	8,753,635	3,026,175
By Land	6,074,544	(b) 5,476,240	7,571,872	‡ 10,769,696	‡ 12,379,136	‡8,891,680
GRAND TOTAL..	294,700,469	344,774,111	348,476,011	337,314,172	362,880,932	370,903,804

* Including shipments from the State of Travancore.

(*a*) Tea consigned from British India to Ceylon is almost entirely transhipped at Colombo to other countries and does not, therefore, appear in the Ceylon Customs Returns as imports into Ceylon.

(*b*) Exclusive of the exports from the North-West Frontier Province for the months, July 1923 to February 1924, for which returns were not received. † Includes Iraq.

‡ These figures are not strictly comparable with the previous figures as they represent all the trade registered at selected railway stations adjacent to the land frontiers, though a fair portion of them is frontier trade. The old system of registration of frontier trade by means of clerks posted on the important trade routes across the frontier has been discontinued from 1st April 1925. The figure for 1925-26 excludes exports from Burma.

Coffee.

The history of the introduction of coffee into India is very obscure. Most writers agree that it was brought to Mysore some two centuries ago by a Mahommedan pilgrim named Baba Budan, who, on his return from Mecca, brought seven seeds with him. This tradition is so universally believed in by the inhabitants of the greater part of South India, that there seems every chance of its being founded on fact. About the beginning of the 19th century there is no doubt coffee had found its way to India, and in 1823 a charter was granted to Fort Gloster, near Calcutta, authorising it to become a cotton mill, a coffee plantation and a rum distillery. Some of the coffee trees planted in fulfilment of that charter are supposed to be still alive, and about the same time coffee was successfully grown in the Botanic Gardens, Calcutta; but the industry of coffee planting nowhere found an abiding place on the plains of India but migrated to the hills of South India, in Mysore more especially, and thus into the very region where tradition affirms it had been introduced two centuries previously.

The first systematic plantation was apparently Mr. Cannon's near Chikmuglur. This was established in 1830. It is supposed, however, that Major Bevan may have actually grown coffee on the Wynad at a slightly earlier date and that Mr. Cockburn's Shevaroy plantation bears the same date as Mr. Cannon's. In 1840 Mr. Glasson formed a plantation at Manantoddy, and in 1846 plantations were organised on the Nilgiri hills.

The Position of the Industry.—The number of reporting plantations in 1927-28 was 3,315 covering a total area of 273,815 acres, as against 3,152 plantations with an area of 256,390 acres in 1926-27. But the area actually under coffee in the reporting plantations in the year under review was 155,839 acres, as compared with 153,433 acres in the preceding year. New land planted with coffee in these plantations during the year amounted to 6,550 acres, while the area of old cultivation abandoned was 4,144 acres, thus giving a net increase of 2,406 acres or about 2 per cent. over the total area under coffee in 1926-27. Of the total area under coffee during 1927-28, Mysore accounted for 51 per cent. Madras 24 per cent. Coorg 23 per cent. and Cochin and Travancore together 2 per cent.

The total reported production of cured coffee during the year was 35,563,321 lbs. as compared with 34,286,806 lbs. in the preceding year—the yield per acre of plucked area being 452 lbs. (254 lbs). in Travancore, 331 lbs. (213 lbs). in Madras, 222 lbs. (338 lbs.) in Coorg, 221) lbs. (234 lbs). in Mysore and 124 lbs. (161 lbs.) in Cochin. The figures for 1926-27 are shown in brackets.

Labour.—The daily average number of persons employed in the plantations during 1927-28 was returned at 91,353 of whom 61,510 were permanently employed (namely, garden labour 43,751 and outside labour 17,759) and 29,843 temporarily employed (outside labour) as compared with 83,881 persons (41,582 garden and 16,037 outside labour permanently employed and 26,262 temporary outside labour in 1926-27.

Exports.—The total exports of coffee decreased steadily from 242,00 cwts, in 1924-25 to 205,000 cwts in 1925-26 and to 150,000 cwts in 1926-27, but in 1927-28 the exports rose and amounted to 277,000 cwts. The principal destinations of Indian coffee were as usual the United Kingdom and France, and shipments to these countries rose from 49,446 and 21,957 cwts to 75,386 and 65, 533 cwts, respectively. Other European countries, namely, Germany, Netherlands, Norway and Belgium also increased their demands from 16,000, 13,000, 8,000 and 5,000 cwts to 33,000, 30,000, 16,000 and 10,000 cwts. respectively. Shipments to Iraq, Arabia and Australia also showed increases.

The exports during the coffee season (*i.e.*, July to June) were 261,523 cwts. in 1927-28 as compared with 241,296 cwts. in 1926-27.

Exports of Coffee.

	Cwts.
1902-03	269,165
1903-04	291,254
1904-05	329,647
1905-06	360,182
1906-07	228,094
1907-08	244,234
1908-09	302,022
1909-10	232,645
1910-11	272,249
1911-12	241,085
1912-13	267,000
1913-14	260,000
1914-15	290,000
1915-16	177,000
1916-17	198,000
1917-18	196,000
1918-19	219,000
1919-20	272,600
1920-21	233,400
1921-22	235,000
1922-23	169,000
1923-24	218,000
1924-25	242,000
1925-26	205,000
1926-27	150,000
1927-28	277,000

The pre-war average value of the coffee exports was Rs. 79,17,000.

INDIAN TOBACCO.

The tobacco plant was introduced into India by the Portuguese about the year 1605. As in other parts of the world, it passed through a period of persecution, but its ultimate distribution over India is one of the numerous examples of the avidity with which advantageous new crops or appliances are adopted by the Indian agriculturist. Five or six species of *Nicotiana* are cultivated, but only two are found in India, namely, *N. Tabacum* and *N. rustica*. The former is a native of South or Central America, and is the common tobacco of India. About the year 1829 experiments were conducted by the East India Company towards improving the quality of leaf and perfecting the native methods of curing and manufacturing tobacco. These were often repeated, and gradually the industry became identified with three great centres: namely, (1) Eastern and Northern Bengal (more especially the District of Rangpur); (2) Madras, Trichinopoly, Dindigul, Coconada and Calicut in Southern India; and (3) Rangoon and Moulmein in Burma. Bengal is the chief tobacco growing Province, but little or no tobacco is manufactured there. The chief factories are near Dindigul in the Madras Presidency, though, owing to the imposition of heavy import duties on the foreign leaf used as a cigar wrapper, some cigar factories have been moved to the French territory of Pondicherry.

The question of improving the quality of Indian tobaccos has received the attention of the Botanical section of the Agricultural Research Institute, Pusa, and three Memoirs have been published recording the results of investigations in that direction. The immediate problem at Pusa is the production of a good cigarette tobacco. Many attempts have been made in the past to introduce into India the best varieties of cigarette tobacco from America, but the results have been disappointing. It is now hoped to build up by hybridization new kinds of tobacco, suited to Indian conditions of growth, which possess in addition the qualities necessary to obtain a better price.

Area under Cultivation.—The cultivation of tobacco is very widespread in Burma. The two main varieties are called "Burmese tobacco" and "Havana tobacco." Of the Burmese tobacco there are two main varieties "Seywet-gyi," the large-leaved variety and "Seywet-gyun," a smaller-leaved variety with pointed leaves. The former yields a heavier crop, but the latter gives better quality. There is always a great demand on the market for both the Havana and the Burma tobacco. The smooth leaves of the Havana plant are used for the wrappers and the coarser Burmese leaf for the filling.

The most important tobacco tracts in British India are:—(*i*) the Coimbatore and Dindigal tract of Madras, where the *Usi-Kappal* and *Wara Kappal* varieties are largely grown, the former supplying the Trichinopoly cigar; (*ii*) the Godavari Delta of Madras; (*iii*) the Rangpur tract of Bengal; (*iv*) the Districts of Bihar and Orissa; (*v*) Guzerat in Bombay and (*vi*) the delta tract of Burma.

The season for harvesting varies in different localities ranging from December to June, but the bulk of the crop is harvested during the months of February, March and April. The leaves when quite dry, are assorted and placed in heaps in stacks to ferment. They are then tied into bundles of 25 or 30, a useless leaf being employed for tying each bundle. The leaves are laid perfectly flat, the bundles being fan-shaped. In this condition they are baled, the broom-like ends projecting outwards. By varying the degree of fermentation of the leaves, different qualities of tobacco are obtained. A black variety is used in India for cake tobacco, and this is the most common product, but a certain amount of yellow leaf is grown for cigar making.

Small Holding Crop.—The area under tobacco in British India is always well above the million-acre line, and there are some 100,000 acres in the Indian States. The outturn varies, according to the attention given to the crop, from 200lb. to as much as 3,000lb. of cured leaf per acre. The long-established Indian theory has been that the crop is suited only to small holdings, as it requires considerable attention and liberal manuring. But these latter conditions, as the history of the Assam tea industry shows, are not necessarily a bar to large plantations and organized production. The possibilities in this direction have been little explored largely because cultivation in small holdings was current when British influence was established in India, whereas the cultivation of tea owes its introduction entirely to British enterprise. The great bulk of the tobacco grown in the country disappears in local consumption, but the export trade is developing.

Since the duty in England is charged by weight and not by value, India, as an exporter of the relatively cheaper grades, has to pay more duty in proportion than some foreign countries. But the higher degree of preference she now enjoys will provide a substantial set off, and at the same time stimulate the efforts being made to raise the quality of production. Another factor in the same direction is the effect of the heavier import duties on tobacco shipped to India, and the consequent tendency of middle-class and other consumers to find satisfaction in the homegrown article.

The Cocaine Traffic.

The form of cocaine chiefly used in India is Cocaine Hydrochloride. This salt forms light shining crystals, with a bitterish taste, and is soluble in half its weight of water. The alkaloid cocaine—of which this is a salt—is obtained from the dried leaves of the Erythroxylon Cocaine which grows in Bolivia, Peru, Java, Brazil and other parts of South America. The leaves are most active when freshly dried and are much used by the Natives as a stimulant. Tea made from them has a taste similar to green tea and is said to be very effectual in keeping people awake. In India the Coca plant seems never to have been cultivated on a commercial scale. It has been grown experimentally in the tea districts of Ceylon, Bengal and Southern India and has been found to produce a good quality and quantity of cocaine. As the plant has not been seriously cultivated and as there is no possibility for the present of the drug being manufactured in India, no restrictions have as yet been placed on its cultivation.

Spread of the habit.—The cocaine traffic in India which seems to be reaching alarming proportion in spite of legislation and strict preventive measures is of comparatively recent growth; though it is impossible to estimate how widespread it was in 1903 when the Bombay High Court for the first time decided that cocaine was a drug included within the definition of an intoxicating drug in the Bombay Abkari Act. Since that date the illegal sale of cocaine in India has largely increased and the various provincial Excise Reports bear witness to the spread of the "Cocaine habit." The consumers of the drug, which is notoriously harmful, are to be found in all classes of society and in Burma even school children are reported to be its victims; but in India as in Paris the drug is mostly used by prostitutes or by men as an aphrodisiac. The habit has spread chiefly to those classes which are prohibited by religion or caste rules from partaking of liquor and the well-known Indian intoxicating drugs.

Smuggling.—So far as the cases already detected show, the persons who smuggle the drug by sea from Europe and places outside India, into India, are chiefly sailors, stewards, firemen and sometimes engineers and officers of foreign ships. The ports through which cocaine enters India are Bombay, Karachi, Calcutta, Madras, Marmagoa and Pondicherry. The main inland distributing centres are Delhi, Lucknow, Meerut, Lahore, Mooltan, Surat and Ahmedabad. Delhi especially is notorious for the cocaine trade. Great ingenuity is employed in smuggling cocaine through the Custom houses. It is packed in parcels of newspapers, books, toys and piece-goods and in trunks which have secret compartments. The retail trade in the towns is very cunningly organized and controlled. In addition to the actual retailers, there is a whole army of watchmen and patrols whose duty is to shadow the Excise and Police Officials and give the alarm when a raid is contemplated. During the War several cases of importation of Japanese cocaine were detected, the importers being Japanese and Chinese Sailors. The original marks on the packets and phials are usually destroyed so that the name of the manufacturing firm may not be found out. In 1922-23 the largest seizure of cocaine made by the Excise Department in the Bombay Presidency was one of 10,500 grains, while in 1923-24 a seizure of 24,000 grains was effected. In October 1924 the Excise Department made a seizure of 46,500 grains in a single case.

The Review of the Customs Adminstration in India 1925-26 contains the following paragraph:

"Most of the cocaine seized on import into India appears to have come from the Far East. The biggest seizures during the year were—

825 oz. at Rangoon.

525 oz. at Calcutta.

275 oz. at Bombay.

250, 198, and 149 oz. at Calcutta.

The total amount of cocaine seized by Custom Houses during the year was 3,453 oz."

The amount seized is either given to Hospitals in India or destroyed. It is no longer possible to buy cocaine from any betelnut seller as it was ten years ago, but scores of cases in the Police Courts show that the retail trade thrives, though to a diminished extent, in Bombay. High profits ensure the continuance of the trade.

The law in regard to Cocaine.—This varies in different provinces. A summary of the law in Bombay is as follows: No cocaine can be imported except by a licensed dealer and importation by means of the post is entirely prohibited. The sale, possession transport and export of cocaine are prohibited except under a license or permit from the Collector of the District. A duly qualified and licensed Medical practitioner is allowed to transport or remove 20 grains in the exercise of his profession; and as far as 6 grains may be possessed by any person if covered by a *bona fide* prescription from a duly qualified Medical practitioner. The maximum punishment for illegal sale, possession, transport, etc., under Act V of 1878 as amended by Act XII of 1912 is as follows: Imprisonment for a term which may extend to one year or fine which may extend to Rs. 2,000 or both and on any subsequent conviction imprisonment for a term which may extend to 2 years or fine which may extend to Rs. 4,000 or both. The law in Bombay has been further amended so as to enable security to be taken from persons who have been convicted of cocaine offences. The new Act also contains a section for the punishment of house owners who let their houses to habitual cocaine sellers.

The Opium Trade.

Two descriptions of opium must be distinguished. *Benares* opium which is manufactured from poppy grown in the United Provinces: and *Malwa* opium which is almost entirely produced in certain Native States in Central India and Rajputana.

Benares Opium.—Cultivation of poppy is confined to a limited area in the United Provinces and is permissible only under a license. The cultivator to whom advances of about one-third of the total amount eventually due to them are made by Govt. free of interest is required to sell the whole of his produce to the Govt. at a rate fixed by them, now Rs. 10 per seer of 700 consistence. The area under licensed cultivation has in recent years been much reduced: in 1912-13 it was 285,220 bighas yielding 26,813 maunds of opium, and in 1925-26 it stood at 113,691 bighas with an outturn of 14,001 maunds. The crude opium received from the cultivators is sent to the Govt. Factory at Ghazipur where it is made up into three different forms:—(1) For export to the Far East known as "Provision" opium. This opium is made up in cakes at 710 consistence, 40 cakes weighing 140 lbs. being packed in a chest: (2) For consumption in India known as "Excise" opium. This is also made up in cakes at 900 consistence, each weighing one seer, 60 cakes being packed in one chest; and (3) Medicinal opium, for use in India and for export to the United Kingdom only.

Malwa Opium.—The poppy from which Malwa opium is manufactured is grown chiefly in the Native States of Indore, Gwalior, Baroda, Ratlam, Jaora, Sitamau, Mewar, Partabgarh, Jhalawar, Kotah and Tonk. The British Government has no concern with the cultivation of the poppy, or the manufacture of the opium but it has since November, 1927, in collaboration with the States, been engaged in investigations directed to the ultimate abandonment by the States of poppy cultivation. The Government is used to regulate, before exports to China were stopped, the import of Malwa opium into, and the transport through, its territories. As the chief market for Malwa opium was China, and as the States in which the drug is produced had no access to the sea, except through British territory, the British Government were able to impose a duty on the importation of the drug on its way to Bombay for exportation by sea.

The poppy is sown in November, the plants flower in February, and by the end of March the whole of the opium has been collected by the cultivators.

Sales of Malwa opium for export to China have ceased since January 1913 and the trade has become extinct since 17th December of that year when the last shipment was made. Practically the whole of the Malwa opium exported from Bombay went to China.

Revenue.—The gross revenue derived by the Government of India from opium in recent years is as follows:—

Year	Rs.
1915–16	2,87,02,712
1916–17	4,74,00,073
1917–18	4,61,83,538
1918–19	4,93,36,670
1919–20	4,55,62,212
1921–21	3,53,41,234
1921–22	3,07,24,798
1922–23	3,78,92,068
1923–24	4,24,81,654
1925–26	3,79,76,177
1925–26	4,14,99,781
1926–27	4,31,48,876
1927–28 (Budget Estimate) ..	3,83,08,000

The only countries to which exports are now permitted are the United Kingdom (as regards medical opium) and the British Far Eastern Colonies, Siam, French Indo-China and the Dutch East Indies.

Internal Consumption.—The internal policy of the Government of India has been, and is, one of non-interference with the moderate use of raw opium, whether the object of the consumer be some real or supposed physical benefit, or merely the indulgence of the almost universal desire of human beings (particularly those whose occupations involve exposure, or severe bodily exertion), for a stimulant or a narcotic. Excessive indulgence has always been suppressed. The total consumption in British India has gone down considerably; it was 5,03,595 seers in 1912-13 and 2,91,272 seers in 1925-26, the latest period for which figures are available.

Agreement with China.—The fluctuations in the revenue derived from opium are directly attributable to the trade conditions arising out of the limitation of opium exports. In 1907 being satisfied of the genuineness of the efforts of the Chinese Government to suppress the habit of consuming opium in China, the Government of India agreed to co-operate by gradually restricting the amount of opium exported from India to China. In 1908 an arrangement was concluded by which the total quantity of opium exported from India was to be reduced annually by 5,100 chests from an assumed standard of 67,000 chests. Under a further agreement, signed in May 1911, the cessation of the trade was to be accelerated on evidence being shown of the suppression of the native production of opium in China, and in accordance with this agreement a further limitation was placed on exports to Chinese ports. The reduction of exports led to an increase in the price of the drug in China and a corresponding rise in the price obtained in India at the auction sales. For some considerable time, however, in 1912 the trade in China was paralysed by the imposition by Provincial Governors in defiance of instructions from the Central Government of restrictions on the importation and sale of Indian opium. Stocks accumulated

rapidly at Shanghai and Hongkong and the position in December 1912 had become so acute that a strong and influential demand was made on the Government of India to relieve the situation by the suspension of sales. Sales were accordingly postponed both of Benares and Malwa opium and in order to afford the Malwa trade the most complete relief, the Government of India undertook to purchase for its own use 11,253 chests of Malwa opium which remained to be exported in 1913. The present position in this regard is that the export trade to China has ceased since 1913. But these details are now of historical importance only.

Export.—Since April 1926, the public auctions at Calcutta have been discontinued, and no opium is exported to the Far East except by Govt. to the Govt. of the importing country under a direct sales agreement. The exports are covered by a certificate from the importing Govt. that the opium is required by them for legitimate purposes and will not be re-exported. In 1926, the Govt. of India also decided to extinguish exports to the Far East progressively in 10 years ending December 31st, 1925, except for strictly medicinal or scientific purposes. Number of chests exported has fallen from 34,827 in 1912 to 8,115 in 1926.

GLASS AND GLASSWARE.

Imports of glass and glassware declined in value from Rs. 2,53 lakhs in 1926-27 to Rs. 2,48 lakhs in 1927-28. As in the preceding year, the premier position was held by Japan which increased her share from Rs. 66½ lakhs to Rs. 69 lakhs, while the supplies from Czechoslovakia dropped to Rs. 61 lakhs from Rs. 63 lakhs in 1926-27 and Rs. 83 lakhs in 1925-26. There were also reduced importations from Germany, Belgium and the United Kingdom. Glass bangles recorded an increase from Rs. 85 lakhs to Rs. 89½ lakhs. Japan accounted for Rs. 26 lakhs and Czechos lovakia for Rs. 50 lakhs as compared with imports to the value of Rs. 21 lakhs and Rs. 51 lakhs respectively from these countries in the preceding year. Beads and false pearls imported chiefly from Czechoslovakia and Japan decreased from 35,000 cwts. to 31,000 cwts in quantity and from Rs. 31 lakhs to Rs. 27 lakhs in value. There was also a decrease under bottles and phials, imports of which amounted to 516,000 gross valued at Rs. 33 lakhs in 1927-28 as compared with 579,000 gross valued at Rs. 39 lahhs in the preceding year.

Manufacture of Glass in India.—Glass was manufactured in India in centuries before Chirst and Pliny makes mention of "Indian Glass" as being of superior quality. As a result of recent archæological explorations, a number of small crude glass vessels have been discovered indicative of the very primitive stage of the Industry. But no further traces of ancient Indian Glass Industry as such survive; yet, it is certain that by the sixteenth century it was an established Industry producing mainly bangles and small bottles. The quality of the material was inferior and the articles turned out were rough. Beyond this stage the industry had not progressed until the nineties of the last century. Manufacture of glass in India on modern European lines dates from the nineties of the last century, when some pioneer efforts were made in this line. Since then a number of concerns have been started, a number of them have failed, while some are still clinging to life owing to war conditions. They mainly devote themselves to the manufacture of bangles and lampware side by side with bottle-making on a small scale. This, therefore, is the criterion which determines the two well-defined classes of the industry in its present stage, (i) indigenous Cottage Industry and (ii) the modern Factory Industry.

(i) The indigenous Cottage Industry which is represented in all parts of the country, but has its chief centres in Firozabad District of U. P., and Belgaum District, in the South, is mainly concerned with the manufacture of cheap bangles made from "glass cakes or blocks" made in larger Factories. The industry is at present in a flourishing state and supplies nearly one-third of the Indian demand for bangles. The quality has been improved by the discovery of new glazing processes and for the present the turnover in this line has gone up to 20 lakhs of rupees a year. But these bangles have now to face a very hard competition from Japan whose "silky" bangles are ousting the old type Indian ones.

(ii) The modern Factory type of organization of this Industry is just in its infancy at present. The existing Factories either stop at producing glass cakes for bangles as in Firozabad or simple kind of lampwares and bottles. With the existing state of knowledge and machinery in India they can neither produce sheet and plate glass, nor do they pretend to manufacture laboratory or table glass. Artistic glassware is out of the question and the private capitalists who have to run their concerns mostly with commercial ends do not think it worth their while to spend money and labour on it. War caused a great decrease in volume—though not so much in value which was much increased—of the imports of the lampware, etc., and in order to meet the Indian demand for them, new Factories were started and old revived, which produced only cheap and simple kind of lampware and bottles on small scale. The total production of these Indian Glass Works has not been exactly estimated, but it is generally supposed that they were able to meet in these war years nearly half the Indian demand for this kind of glassware. There are at present 14 Factories engaged in the production of lampware, of which two or three only produce bottle and carboys also. The chief centres for the former kind are Bombay, Jubbulpore, Allahabad, and Bijhoi and Ambala; while bottles are only manufactured at Naini and Lahore, and recently at Calcutta.

During the latter years of the war period, a number of Glass Works were opened in the Bombay Presidency and adjoining districts, local manufacture having been stimulated by the cessation of imports of German, Austrian and Belgian glass.

Causes of failure.—Records of the earlier ventures have shown that the failures in some cases were due in part at least to preventible causes, prominent among which were (1) Lack of enlightened management. (2) Lack of proper commercial basis, as in some cases the proprietors had a number of other more larger concerns to look to. (3) Bad selection of site. An ideal site for a Glass Factory would be determined by the (*a*) nearness of quartz and fire-clay, (*b*) nearness of fuel, and (*c*) by the nearness of market. At least two must be present. In some concerns, two were absent. (4) Specialisation was lacking, some factories in their initial stages trying to manufacture three or four different kinds of glassware simultaneously like lampware, bottles, and bangles, etc. (5) Paucity of sufficient fluid capital for initial expenses for machinery or other improvements or even in some cases for running the concern in the beginning.

But beyond these there are certain real and special causes that contributed to the failure of some of these and hinder the progress of the rest. Chief among them are (1) The Industry is in its infant stage and hence such failures are but incidental. (2) No expert guidance in this line, there is a lack of men and good literature. (3) Paucity of skilled labour of higher type. The present Indian workmen in this line and blowers are few in number and illiterate. They, therefore, master the situation and are unamendable to management. (4) Heavy cost of good fuel, the works usually being situated where good sand and quartz can be obtained, and consequently, in most cases, at a great distance from the coal-fields. (5) To a certain extent, competition from Japan and other European countries.

Alkali used is almost entirely of English manufacture being Carbonate of Soda 98-99% in a powdered form. This Alkali has almost completely taken place of the various Alkaline Earths formerly employed by the Glass Bangle manufactures as the latter cannot be used in the manufacture of glass which is to compete with the imported article. These points must be carefully noted for future guidance.

The Industry developed considerably under war conditions; but in peace times, in this transition stage, immediate efforts must be made in the direction of what the Indian Industrial Commission say in their Report (Appendix E)., *viz.*: "The Glass Industry, even in its simplest form is highly technical and can be efficiently carried on only by scientifically trained managers and expert workmen. The present stage has been reached by importing men, only partially equipped with the necessary qualifications, from Europe and Japan, and by sending Indian students abroad to pick up what knowledge they can. The glass industry is a closed trade and its secrets are carefully guarded, so that the latter method has not proved conspicuously successful."

Bibliography—Indian Industries Commission Report (Appendix); Indian Munitions Board, Industrial Handbook, etc. "Notes on Glass Manufacture." By C. S. Fox. (Bulletin No. 29 of Indian Industries and Labour, 1922.)

WILD BIRDS' PLUMAGE.

The Bill for prohibiting the importation into England of wild birds' plumage, which was introduced into Parliament in 1913, was the occasion of a fierce controversy on the nature of the plumage traffic. Organised opposition to the Bill, although successful in preventing it from becoming law, failed to convince the public that the plumage trade was not one of great cruelty. The controversy continued with unabated vigour until May 1921, when an agreement was arrived at between the two parties. The most important clause in the agreement stipulates that within four months of the Bill becoming law an Advisory Committee shall be appointed by the Board of Trade. This Committee will consist of an independent chairman, two expert ornithologists, three representatives of the feather trade, and four other independent members. The function of this Committee will be to advise the Board of Trade as to additions to and removals from the existing schedule (ostrich and eider duck) of birds whose plumage may be imported. The passing of the Plumage Bill will thus place England ab east of the United States and of her own daughter Dominions in the suppression of a barbarous industry, as all legitimate methods of breeding birds for their plumage will be safeguarded as definite exceptions under the Plumage Bill.

Plumage birds.—The birds most killed on account of their plumage in India are paddy birds, egrets, kingfishers, bustards, junglefowl, pheasants, paroquets, peafowl, hoopoes and rollers. Egrets and rollers (popularly known as Blue Jays) are perhaps the birds which have been most extensively killed in the past, and of these, egrets have attracted the greatest attention. There are three species met with in India: the Large, Smaller and Little Egrets. All three are pure white slim birds which develop during the breeding season a dorsal train of feathers, which elongates and becomes "decomposed" as it is expressed, that is to say, the barbs are separate and distinct from each other, thus forming the ornamental plume or aigrette for which these birds are much sought after and ruthlessly destroyed. Thirty years ago the exports were valued at over six lakhs in one year, but since 1895 the export trade has steadily diminished. But, though legitimite exports have been stopped, the trade is so lucrative as to lead to many attempts at smuggling. Within a recent period of 12 months the Bombay Preventive Department, for example, seized egret plumes worth Rs. 2,19,047 in India and £44,000 in London. The rupee value represents the sum which the exporters paid to those who took the feathers from the birds, so the loss to the trade was considerable. In addition, penalties varying from Rs. 5,000 to Rs. 10,000 each and amounting altogether to Rs. 59,175 were inflicted on the ten merchants concerned in attempting to export the feathers. A case was reported from Rangoon in 1916 of a man being found in possession 22 lbs. of egret feathers valued at Rs. 66,000. Although frequently denied, there seem very little reason to doubt, that within the last decade egrets have been successfully bred in capti-

vity by the fisherfolk in the province of Sind. But whether such birds can be bred without cruelty, and if so whether the export of their plumage could be legalised without encouraging barbaries in other areas of the peninsula, is a question which can only be decided as a result of a searching and exhaustive inquiry.

Legislation.—Indian legislation on the subject will be studied with interest by those who have followed the course of legislation on this subject in other countries. Until 1887 no legislation was considered necessary in India. An Act of that year enabled local governments and municipal and cantonment authorities to make rules prohibiting under penalties the sale or possession of wild birds recently killed or taken during their breeding seasons, and the importation into any Municipal or cantonment area of the plumage of any wild birds during those seasons; and local governments were empowered to apply these provisions to animals other than birds.

Afterwards, in 1902, action was taken under the Sea Customs Act to prohibit the exportation of the skins and feathers of birds, except feathers of ostriches and skins and feathers exported *bona fide* as specimens illustrative of natural history. Act VIII of 1912 goes much further than the previous law. It schedules a list of wild birds and animals to which the Act is to apply in the first instance, enables local governments to extend this list, empowers local governments to establish "close times," presumably during the breeding seasons, in the whole of their territories or in specified areas, for wild birds and animals to which the Act applies, and imposes penalties for the capture, sale, and purchase of birds and animals in contravention of the "close time" regulations, and for the sale, purchase and possession of plumage taken from birds during the close time. There is power to grant exemptions in the interests of scientific research, and there are savings for the capture or killing by any person of a wild animal in defence of himself or of any other person, and for the capture or killing of any wild bird or animal in *bona fide* defence of property.

One defect in the law may be noticed. When an exporter is discovered, the Customs Department can on a magistrate's warrant have his house searched and seize the feathers found there to produce as evidence that he is engaged in the trade. But they have to return the feathers and can only take possession of them if they are discovered presently in course of export.

HIDES, SKINS AND LEATHER.

India's local manufac tures of skins and leather have steadily increased in recent years. Previous to the outbreak of war, the trade in raw hides in this country was good; there was a large demand for hides, and prices ruled high. While in the continental markets stocks were high owing to overtrading in the previous year, the United States had a shortage which was estimated at approximately two million pieces. On the declaration of war, the trade which had up till then been brisk was seriously dislocated. Exports to enemy countries, especially to the great emporium of Indian hides, Hamburg, were stopped, and exporters had to find new markets for the raw material. The raw hide business of India, it is well known, has hitherto been largely, if not quite entirely, in the hands of German firms or firms of German origin. Germany has had the largest share of India's raw hides. In the four months before the outbreak of war she took 39 per cent. of the total exports. In 1912-13 she took 32 per cent. and in 1913-14, 35 per cent. Raw hides were exported to Trieste in considerable quantities whence they were taken to Germany or Austria. In the four months before the outbreak of war 15 per cent. of India's exports passed through Trieste in 1913-14 the percentage was 21.

The trade showed a marked improvement in 1927-28 owing to a world shortage of hides and leather. The leather stocks of the world have been greatly depleted and the available supply of hides is sufficient to meet the increasing demand. Prices advanced, hides and heavy leather benefiting most, and the total exports increased in value by 23 per cent to Rs. 17,88 lakhs.

Conditions of the Trade.—The trade in hides and skins and the craft in leather manufacture are in the hands either of Mahomedans or of low caste Hindus, and are on that account participated in by a comparatively small community. The traffic is subject to considerable fluctuations concomitant with the vicissitudes of the seasons. In famine years for instance the exports of untanned hides rise to an abnormal figure. The traffic is also peculiarly affected by the difficulty of obtaining capital and by the religious objection which assigns it to a position of degradation and neglect: it has thus become a monopoly within a restricted community and suffers from the loss of competition and popular interest and favour.

No large industry has changed more rapidly and completely than that of leather. By the **chrome process**, for example, superior leather may be produced from the strongest buffalo hides in seven days, from cowhide in twenty-four hours, and from sheep and goat skins in six to eight hours; and these operations formerly took thirty days or as much as eighteen months. Of these changes the native tanners of India were slow to take advantage, but in spite of general backwardness the leather produced by some of the tanneries, especially those under European management, is in certain respects equal to the best imported articles. But since the outbreak of war pro-

gress has been more rapid and considerable quantities of special forms of chrome leather, for which Indian hides are particularly suitable, have found a ready market in London.

Protecting the industry.—The report of the Industrial Commission pointed out that the principal difficulty at present in the hides and leather industry was the lack of organisation and expert skill. Government action to foster the industry was first taken in September 1919, when a Bill was introduced in the Imperial Legislative Council further to amend the Indian Tariff Act, 1894. The effect of this Bill was officially described as follows: "It is to impose an export duty of 15 per cent. on hides and skins with a rebate of 10 per cent. on hides and skins exported to other parts of the Empire, and there tanned. Its object is to ensure that our hides and skins shall be converted into fully tanned leather or articles of leather so far as possible in India and failing this in other parts of the Empire, instead of being exported in a raw state for manufacture in foreign countries." Sir George Barnes who was in charge of the Bill and described the tanning industry as one of the most promising Indian industries explained that "the present position is that we have in India at the present time some hundreds of tanneries for the tanning of hides, a large number of which have come into existence in order to satisfy military requirements during the war. We have in fact the foundations of a flourishing tanning industry, but there is reason to fear that it may tend to dwindle and disappear with the diminution of military requirements, if some other support is not given. We want to keep this industry alive, and we believe that in this case protection in the shape of a 15 per cent. export duty is justifiable and ought to be effective. It is clearly just also that the same measure of protection should be extended to the tanners of skins whose business, as I have already stated, was injured by the necessities of the war. Though Indian tanneries have enormously increased in number during the past three years, they can only deal with a comparatively small proportion of the raw hides and skins which India produces, and it is to the advantage of India and the security of the Empire generally that this large surplus should, so far as possible, be tanned within the Empire, and with this end in view the Bill proposes a 10 per cent. rebate in respect of hides and skins exported to any place within the Empire. I should add that it is proposed to limit by notification the benefit of this rebate to hides and skins actually tanned within the Empire; and Indian hides and skins re-exported from an Empire port for the purpose of being tanned abroad will not be entitled to any rebate."

Indigenous methods.—India possesses a large selection of excellent tanning materials such as Acacia pods and bark, Indian sumach, the Tanner's cassia, Mangroves, and Myrabolans. By these and such like materials and by various methods and contrivances, hides and skins are extensively cured and tanned and the leather worked up in response to an immense, though purely local, demand.

GRAIN ELEVATORS.

The question of adopting elevators for the handling of Indian grain has engaged attention for some time and has assumed increased importance in the light of the railway congestion experienced in recent years and more particularly in the grain season. In the last three years great strides have been made by other countries in the adoption or perfecting of the elevator system, and a large mass of contemporary data on the subject has been brought together by the Commercial Intelligence Department. Since the subject is one that cannot receive adequate consideration in India till the facts are before the public, these have been embodied in a pamphlet entitled *Indian Wheat and Grain Elevators*, by the late Mr. F. Noel-Paton, Director General of Commercial Intelligence to the Government of India. The work gives full particulars regarding India's production of wheat, and shows that less than one-eighth of the crop is exported. It describes the conditions under which the grain is held and the risks that it runs. It is pointed out that the cultivator has no adequate means of preserving his wheat and that he is constrained to sell at harvest time: also that the prices then obtained by him are considerably lower than those usually current in later months. The constant nature of the European demand is explained and an attempt is made to gauge the probability that the enormously increased quantities of wheat to be expected when new irrigation tracts come into bearing would be accepted by Europe at one time and at a good price, or could be economically transported under a system in which a few months of congestion alternated with a longer period of stagnation. Figures are given which suggest that in practice the effect of equipping railways to do this is to intensify the evil and so to engage in a vicious circle. The author explains the structural nature of elevators and their functions as constituted in other countries. Particulars are given as to the laws that govern their operations in such countries.

TRADE MARKS.

The **Indian Merchandise Marks Act** (IV of 1889) was passed in 1889, but its operation in the earlier years was restricted, especially in Calcutta, in consequence of the lack of adequate Customs machinery for the examination of goods. In 1894, with the introduction of the present tariff, the Customs staff was strengthened for the examination of goods for assessment to duty, and this increase enabled examination to be made at the same time for the purposes of the Merchandise Marks Act. The Act was intended originally to prevent the fraudulent sale of goods bearing false trade marks or false trade descriptions (as of origin, quality, weight, or quantity). While the Act was before the Legislature a provision was added to require that piece-goods should be stamped with their length in yards. In this respect these goods are an exception, for the Act does not require that other descriptions of goods should be stamped or marked, though it requires that when goods are marked the marks must be a correct description. **The number of detentions** under the Act during the twenty years ending 1924-25 has been :—

Average of the five years ending	1907-08	1,198
" " " " ..	1912-13	1,960
" " " " ..	1917-18	2,810
" " " " ..	1922-23	1,840
" " " " ..	1924-25	3,331

Detention is but rarely followed by confiscation, and there have been only 64 such cases during the past ten years. Usually detained goods are released with a fine, and this procedure was followed in 16,919 cases out of the 27,184 detentions ordered in the same period. In 10,198 cases the detained goods were released without the infliction of a fine. In this period of ten years 9 per cent. of the detentions were on account of the application of false trade marks or false trade descriptions. In 69 per cent. of the cases detention was ordered because the country of origin was either not stated or was falsely stated, and in 22 per cent. because the provisions of the Act for the stamping of piece-goods had been infringed.

INDIAN INVENTIONS AND DESIGNS.

A handbook to the **Patent Office** in India, which is published by the Government Press, Calcutta, gives the various Acts, rules, and instructions bearing on the subject together with hints for the preparation of specifications and drawings, hints for searchers and other valuable information that has not hitherto been readily accessible to the general public in so convenient a form. In the preface the Controller of Patents and Designs explains the scope of the Patent laws in India and indicates wherein they differ from English law and procedure.

The foundation of patent legislation throughout the world lies in the English "Statute of Monopolies" which was enacted in 1623, the 21st year of King James the First. In part this Act has been repealed, but the extant portion of the more important section 6 is as follows:— "Provided also that any declaration before mentioned shall not extend to any letters patent and grants of privilege for the term of fourteen years or under, hereafter to be made of the sole working or making of any manner of new manufactures within this realm to the true and first inventor and inventors of such manufactures, which others at the time of making of such letters patent and grants shall not use, so as also they be not contrary to the law nor mischievous to the State by raising prices of commodities at home, or hurt of trade, or generally inconvenient; the said fourteen years to be accomplished from the date of the first letters patent or grants of such privilege hereafter to be made, but that the same shall be of such force as they should be if this Act had never been made, and of none other."

The **existing Indian Patent Law** is contained in the Indian Patents and Designs Act, 1911, supplemented by the Indian Patents and Designs (Temporary Rules) Act, 1915, and by the Rules made under those Acts. The Patent Office does not deal with trade mark or with copyright generally in books, pictures, music and other matters which fall under the Indian Copyright Act III of 1914. There is, in fact, no provision of law in British India for the registration of Trade Marks which are protected under the Merchandise Marks Act (IV of 1889) which forms Chapter XVIII of the Indian Penal Code.

On the whole, Indian law and procedure closely follow that in the United Kingdom for the protection of inventions and the registration of designs, as they always have done in matters of major interest. One main difference exists, however, as owing to the absence of provision of law for the **registration of trade marks,** India cannot become a party to the International Convention under which certain rights of priority are obtainable in other countries.

The first Indian Act for granting exclusive privileges to inventors was passed in 1856, after an agitation that had been carried on fitfully for some twenty years. Difficulties arising from an uncertainty as to the effect of the Royal Prerogative prevented earlier action, and, owing to some informalities the Act itself was repealed in the following year. In 1859 it was re-enacted with modifications, and in 1872 the Patterns and Designs Protection Act was passed. The protection of Inventions Act of 1883, dealing with exhibitions, followed, and then the Inventions and Designs Act of 1888. All these are now replaced by the present Act of 1911.

The existing Acts extend to the whole of British India, including British Baluchistan and the Santhal Parganas. This of course includes Burma, but it does not embrace the Native States. Of the latter three, *viz.*, (1) Hyderabad (Deccan), (2) Mysore, (3) Gwalior have ordinances of their own, for which particulars must

be obtained from the Government of the States in question as they are not administered by the Indian Patent Office in Calcutta. The object of the Act of 1911 was to provide a simpler, more direct, and more effective procedure in regard both to the grant of patent rights and to their subsequent existence and operation. The changes made in the law need not here be referred to in detail. They gave further protection both to the inventor, by providing that his application should be kept secret until acceptance, and to the public, by increasing the facilities for opposition at an effective period. At the same time a Controller of Patents and Designs was established, with power to dispose of many matters previously referred to the Governor-General in Council, and provision was made for the grant of a sealed "patent" instead of for the mere recognition of an "exclusive privilege." The provisions of the Act follow with the necessary modifications those of the British Inventions and Designs Act of 1907.

Important amendments have been made in the Indian Patents and Designs Act since 1911, the most important being the priority given to Indian Inventors over others to apply for British patents within 12 months from the date of the Indian application. Similarly, an applicant for a British patent has priority over other applicants in India for 12 months from the date of his British application.

Printed Specification of applications for patents, which have been accepted (8 annas per copy), may be seen free of charge, together with other publications of the Patent Office at the following places:—

AHMEDABAD .. R. C. Technical Institute.

ALLAHABAD .. Public Library.

BANGALORE . Indian Institute of Science.

BARODA .. Department of Commerce and Industry

BOMBAY .. Record Office.

" .. Victoria Jubilee Technical Institute, Byculla.

" .. The Bombay Textile and Engineering Association, No. 1A, Sussex Road, Parel.

CALCUTTA .. Patent Office, No. 1, Council House Street.

" .. Bengal Engineering College, Sidpur.

CAWNPORE .. Office of the Director of Industries, United Provinces.

CHINSURAH .. Office of the Commissioner, Burdwan Division.

CHITTAGONG . Office of the Commissioner, Chittagong Division.

DACCA .. Office of the District Board, Dacca,

DELHI .. Office of the Deputy Commissioner,

HYDERABAD . Industries and Commerce Department of His Highness the Nizam's Government.

KARACHI .. Office of the City Deputy Collector;

LAHORE .. Punjab Public Library;

LONDON .. The Patent Office, 25, Southampton Buildings, W. C.

MADRAS .. Record Office, Egmore.

" .. College of Engineering.

MYSORE .. Office of the Secretary to Government, General and Revenue Department.

NAGPUR .. Victoria Technical Institute.

POONA .. College of Engineering.

RANCHI .. Office of the Director of Industries, Bihar & Orissa.

RANGOON .. Office of the Revenue Secretary Government of Burma.

ROORKEE .. Thomason College.

SHOLAPUR .. Office of the Collector.

PUBLICATIONS on sale at the Patent Office:—

		Price Rs. a.
Patent Office Handbook (Acts, Rules and Instructions)		1 0
The Indian Patents and Designs Act, II of 1911		0 10
The Indian Patents and Designs Act, II of 1911 (Urdu and Hindi) ..	each	0 2
The Indian Patents and Designs Rules, 1912		0 2
Weekly Notifications (Extract from the *Gazette of India*)		0 1
Annual Subscription with postage ..		3 0
Inventions (Consolidated Subject Matter Index, 1900—1908, and Chronological lists, 1900—1904) ..		2 8
Inventions (Consolidated Subject Matter Index, 1900—1911, and Chronological lists, 1905—1911) ..		3 0
	each.	
Patent Office Journal (issued quarterly)	,,	0 8
Patent Office Journals, 1914, 1915, 1916, 1917, 1918, 1919, 1920 ..	,,	1 0
Printed Specifications of Inventions since 1912	,,	0 3

ABSORPTION OF GOLD (both coin and bullion) IN INDIA

(In lakhs of Rupees.)

	Average of 5 years ending											
	1893-94.	1898-99.	1903-04.	1908-09.	1913-14.	1918-19.	1924-25.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
1. Production (b)	71	2,01	2,95	3,40	3,36	3,39	2,72	2,55	2,54	2,23	2,18	2,18
2. Imports	4,12	5,48	13,00	16,85	32,79	9,88(a)	30,66(a)	29,25	74,29	35,23	19,50	18,13
3. Exports	2,02	3,23	6,82	7,50	4,64	3,01(a)	8,28(a)	6	30	38	10	3
4. Net imports (i.e., 2—3) ..	2,10	2,25	6,18	9,35	28,15	6,87(a)	22,38(a)	29,19	73,93	34,85	19,40	18,10
5. Net addition to stock (i.e., 1+4)	2,81	4,26	9,13	12,75	31,51	10,26	25,10	31,74	76,47	37,08	21,58	20,28
6. Balance held in mint and Government Treasuries and Currency and Gold Standard Reserves	..	66	12,88	6,57	19,11	16,93	27,92	22,32	22,32	22,32	22,32	29,76
7. Increase (+) or decrease (—) in stock held in mints, etc., as compared with the preceding year	..	+61	+2,67	—3,25	+4,47	—1,02	+99,11	—2,00	..	..	..	†7.44
8. Net absorption (i.e., 5—7) ..	2,81	3,65	6,46	16,00	27,04	11,28	24,11	33,74	76,47	37,08	21,58	12,84
9. Progressive total of additions to stock	51,74	61,86	1,01,19	1,58,81	2,77,15	3,72,61	4,66,83	5,19,67	5,96,14	6,33,22	6,54,80	6,75,08
10. Net progressive absorption ..	51,74	61,19	88,31	1,52,24	2,58,04	3,55,68	4,38,32	4,97,36	5,73,83	6,10,91	6,32,49	6,45,33

Note.—The quinquennial average figures are inserted only for comparative purposes. The progressive total of additions to stock (item 9) and net progressive absorption (item 10) are calculated on the annual figures and are not based on these averages. Item 9 is the sum of the yearly figures in item 5 and item 10 the sum of the yearly figures in item 8.

(a) Excludes gold imported and exported on behalf of the Bank of England.

(b) Figures are for calendar year ending 31st December.

The Indian Tariff Board 1928.

Five reports of the Indian Tariff Board were published in 1928,

(1) on the grant of protection to the ply-wood and tea chest industry,

(2) on the question of tariff equality in respect of the manufacture of camel hair cotton and canvas ply belting;

(3) on the grant of protection to the manufacture of wagons and underframes, component parts thereof and wire and wire nails,

(4) on the grant of protection to the oil industry, and

(5) on the grant of protection to the match industry.

Camel hair, cotton and canvas, ply belting.—This subject was referred to the Tariff Board as the outcome of representations which had been received by the Government of India that the development of certain industries in India was hampered by the fact that the duty on the finished article was lower than the duty on the materials which had to be imported for its manufacture. Thus whilst the imported cotton yarn from which cotton belting is manufactured was subject to a duty of 1½ anna per lb. and the black proofing, the most common imported raw material used for dressing the belt was subject to a duty of 15 per cent *ad valorem*. Cotton belting, on the other hand, was imported free of duty. In its report which was submitted to the Goverment of India in October 1927, the Tariff Board found that the Indian manufacturer was at adisadvantage in the matter of customs duty of Rs. 3-4-6 per 100 feet of belting and recommended that the 15 per cent. *ad valorem* duty on imported black proofing should be abolished and that a duty of 5 per cent *ad valorem* should be imposed on imported cotton belting. In the case of hair belting, which is woven partly from cotton yarn, and partly from a kind of imported yarn known as camel hair and is treated in the same way as cotton belting, the Tariff Board found that the total duty paid on the raw materials was Rs. 8-12-1·02 per 100 feet of belting manufacturred whereas no duty was leviable on imported hair belting. It, therefore, recommended that in this case also the 15 per cent. *ad valorem* duty on imported black proofing should be abolished, that the duty on imported camel hair yarn should be reduced from 15 per cent. to 6 per cent *ad valorem* and that a duty of 5 per cent *ad valorem* should be imposed on imported hair belting. In order that the duty on all three kinds of fabric belting should be uniform, the Board also recommended a duty of 5 per cent. on imported cotton ply belting though its manufacture in India is at present of small importance.

Decision of the Government of India—In a Resolution dated February 10th, 1928, the Government of India accepted the Board's recommendation that a duty of 5 per cent *ad valorem* should be imposed on imported cotton, camel hair and canvas ply belting but rejected the proposal that the duty on black proofing should be removed. They decided, however, that the duty on camel hair yarn should be reduced from 15 per cent. to 5 per cent. Legislation giving effect to this decision was embodied in the Tariff Amendment Act passed in March, 1928. (Act VII of 1928).

Ply-Wood and Tea Chest Industry.—The question of protection to the Ply-wood and Tea Chest industry was referred to the Tariff Board in May, 1927, at the request of the Assam Saw Mills and Timber Company, Limited, and the Assam Railways and Trading Company, Limited. In its reference to the Tariff Board, the Government of India pointed out that there was no import duty on tea chests and lead sheets for tea chests until 1916. A duty of 2½ per cent. was imposed in 1916 for revenue purposes and this was raised in 1923 to the general duty of 15 per cent. They also pointed out that imported tea chests and lead sheets for tea chests were ordinarily re-exported as containers for Indian tea and were then entitled to a refund of seven eighths of the import duty, provided they were identified to the satisfaction of the Collector of Customs and that re-export was made within two years from the date of importation. Such identification might sometimes be possible but would cause much trouble and delay both to the Customs administration and to the re-exporter. In view of the special circumstance that tea chests and lead sheets for tea chests were ordinarily imported for the purpose of subsequent re-export, the continuance of a revenue duty might be open to objection.

In its report which was submitted to the Government of India in September 1927 the Tariff Board found that, with the exception of tin for the manufacture of tinplate and possibly certain alkalies for the manufacture of casein cement, all the raw materials-the most important of which are timber, casein for glue and lead for linings—for the manufacture of tea chests are vailable in sufficient quantities in India. As regards the other conditions laid down by the Fiscal Commission, the Board found that very severe competition had been experienced in recent years in Northern India from imported tea chests, and that without some form of assistance, the ply-wood factories would be forced to suspend manufacture. If, however, adequate support were granted, the industry would be able to stand without protection within a reasonable period. It did not appear that the manufacture of plywood products other than chests required any assistance but such products constituted a very small portion of the out-turn of the existing factories—the two mentioned above and the Jalpaiguri Timber and Lead Mills Company, Limited—which were mainly engaged in the manufacture of tea chests.

As regards the measure of protection required, the Board found that the fair selling price of a tea chest 19″×19″×24″ in India on a production of 5,00,000 chests annually might be estimated at Rs. 2-15-6·4 against a price for imported chests of the same dimensions (without duty) f. o. r. Calcutta of Rs. 2-6-10·8. Allowing for the freight advantage of imported chests to the tea gardens, the adjusted import price

comparable to the fair selling price of Indian chests would be Rs. 2-5-7·8. The difference between the fair selling price and the adjusted import price, *viz.*, 9 annas 10.6 pies represented the measure of protection which the Board considered necessary subject to slight further adjustment.

As regards the form in which protection should be given, the Board held it undesirable to enhance the import duty above the general 15 per cent. *ad valorem* level in view of the additional burden on the Tea industry and of the practical difficulties that would be involved. It, therefore, recommended that the assistance should take the form of a specific export duty on tea chests other than those of which the plywood panels were of Indian manufacture. The import duty on all plywood articles other than tea chests and rubber boxes should remain unchanged at 15 per cent. *ad valorem* as should that on the fittings of tea chests and rubber boxes and the linings of tea chests. The import duty on the plywood panels and battens of tea chests and rubber boxes should be abolished. Its place should be taken by a specific export duty of 6 annas 6 pies per 100 lbs. of tea exported in chests of which the plywood panels were not of Indian manufacture. The Board recommended that, of this sum, 4½ annas per 100 lbs. of tea should be made over to the Indian Tea Cess Committee, the cess leviable under the Indian Tea Cess Act being reduced by 3 annas per 100 lbs. of tea.

The Board further recommended that the views of the plywood companies should be considered by local Governments in connection with the enunciation or planting of trees suitable for the Plywood industry. It also suggested that steps should be taken to extend and improve the facilities for research at the Forest Research Institute, Dehra Dun, in connection with the manufacture of plywood and that local Governments should co-operate with the Research Institute in its investigations. The specifications for opium chests should be drawn up by the Opium Department in consultation with the Indian Stores Department and the Indian plywood manufacturers in such a way as to ensure that, so far as possible, effect was given to the Government's policy of encouraging Indian industries. The period of protection recommended by the Board was five years.

Decision of the Government of India. In a Resolution dated February 18th, 1928, the Government of India accepted the findings of the Tariff Board except in regard to the form in which assistance to the Plywood industry should be given. They considered that the method proposed by the Board would lead to undesirable complications and they were unable to approve the imposition of an export duty for protective purposes. They were of opinion that the Board had attached undue weight to the grant of protection by means of an import duty. The additional burden imposed on the Tea industry by such a duty would not be a heavy one, and where protection was the object to be attained and not revenue, the refund of a drawback on re-export was not, in their view, open to objection in principle. They, therefore, decided to introduce legislation imposing a duty of 30 per cent. on all forms of plywood and on the battens and corner pieces of plywood chest and abolishing the drawback admissible on re-export. This rate of duty would give the same amount of protection as had been recommended by the Board. The Government of India considered that, for reasons of convenience in Customs administration, it should be applied to all forms of plywood though the imports other than tea chests, were so small that, if they alone were in question, no protection would be needed.

Legislation embodying this decision was introduced in the Legislative Assembly on March 9th, 1928, but has not been proceeded with.

Wagons and underframes, component parts thereof and wire and wire nails—The Report of the Tariff Board regarding the grant of protection to the manufacture of railway wagons and underframes, component parts thereof and wire and wire nails which was submitted to the Government of India in June, 1927, concluded the Statutory inquiry held by the Board into the steel industry. The Board's first report on this industry was summarised in the Times of India Year Book of 1927.

I. Wagons and under frames.—As regards railway wagons and underframes, the Steel Industry (Protection) Act of 1924 provided for the payment of bounties not exceeding Rs. 7 lakhs in each of the financial years 1924-25, 1925-26 and 1926-27. The Board found that under the stimulus of this scheme, the wagon industry (in which term they included also the construction of underframes) had made great progress and was in a position to meet a large proportion of the normal demand for wagons and underframes in India. In consequence partly of the reduction in the cost of material but largely of the decrease in costs resulting from large orders for a few standard types of wagons, wagon manufacturers had reached a stage at which they could normally withstand foreign competition with no assistance other than that of the existing revenue duty of 10 per cent. The Board, therefore, recommended that the bounty system should be abandoned and that no increase in the existing duty of 10 per cent. on wagons and underframes should be made. From the point of view of the wagon industry, an unfortunate situation had, however, arisen owing to improvements in railway administration which had made it possible to reduce the requirements of the railways in respect of new broad gauge wagons to such an extent that it would probably be unnecessary to place orders for this class of wagon for three years and possibly longer. This situation might have been alleviated, if not entirely averted, if the orders for 1450 broad gauge wagons which had been placed abroad in December, 1925, had been withheld and placed later with Indian firms. Special measures had, however, been taken temporarily to deal with it. The Peninsular Locomotive Company's works had been acquired by Government and sufficient orders for miscellaneous wagons and underframes had been placed with the remaining firms to keep their works in operation. In the Board's view, something more than this was required to assist the wagon industry until normal conditions returned. They, therefore, recommended that, until the demand for wagons and underframes

in India reached a total of 5,000 annually in terms of the type of wagon known as C-2, all orders should be placed in India by competitive tender from Indian manufacturers. In view of the absence of foreign competition and the fact that there are now only three firms—Messrs Burn and Company, the Indian Standard Wagon Company and Messrs. Jessop and Company—manufacturing wagons in India, of which the first two are under the same management, the Board considered it advisable that maximum prices within which tenders could be accepted should be fixed. They accordingly recommended that subject to minor adjustments, maximum prices should be fixed at the level of the lowest c. i. f. price as shown in the tenders for wagons in November 1925, and for underframes in April 1926. To these prices, an addition of 12½ per cent should be made, representing the addition which the Board considered necessary to secure on the average a reasonable price whilst orders for rolling stock were restricted below the capacity of Indian manufacturers. The appropriate charges for landing, wharfage, etc., and erection should be added.

The Board also recommended that the question of the extent to which it was advisable to anticipate future requirements for wagons and underframes or to replace old rolling stock should be reconsidered. They suggested that, on the revival of the normal demand for rolling stock, the system of restricting orders to the capacity of the firm tendering, as certified by the Indian Stores Department should cease but that adequate penalties should be provided and enforced for late delivery.

II. Component parts.—(a) *Forgings.*—The Board considered that the manufacture of forgings should be regarded at present as merely a process incidental to the construction of wagons and not as a separate industry and that, in these circumstances, when the demand for wagons became normal, the same duty should be imposed on imported forgings as on wagons and underframes. The restriction of the demand for broad-gauge wagons meant, however, restriction of the demand for wagon forgings and the Board, therefore, suggested that orders for forgings as spare parts should continue to be placed in India as far as possible and that, in comparing Indian with foreign prices, an allowance of 2½ per cent. above the existing revenue duty of 10 per cent should be made.

(b) *Steel Castings and Spring Steel.*—The Board found that, since its first enquiry, the annual demand for steel castings had sufficiently increased to permit of an economic output. They, therefore, considered that a good case had been made out for protection. They considered that the best and most economical method of extending help to the industry was by means of a bounty and accordingly recommended that on all steel castings manufactured by the Hukumchand Electric Steel Works for railway wagons, underframes and locomotives during the period October 1st, 1927, to September 30th, 1930, a bounty of Rs. 2-8-0 per cwt. should be paid to the Company subject to a maximum of Rs. 1,80,000 for the whole period. Subject to this maximum, no restriction should be placed on the amount to be paid in any one year. No recommendation was made in respect of spring steel as it is not yet manufactured on a commercial basis and no reliable information as to the cost of production had been forthcoming.

(c) *Bolts and Nuts.*—The manufacture of bolts and nuts in India is at present on so small a scale that the Board did not consider present costs a guide to the amount of protection required if large scale production were undertaken. There appeared, however, good ground for the removal of the inequality of tariff treatment as between the Indian manufacturer and his foreign competitors which existed under the Tariff Schedule under which high specific duties were charged on the steel bars from which bolts and nuts are manufactured whereas the duty on imported bolts and nuts was only 10 per cent *ad valorem.* The Board, therefore, recommended that, on all bolts and nuts falling under Article 61 of the Statutory Tariff Schedule, a specific duty of Rs. 2 per cwt. should be levied in place of an *ad valorem* duty of 10 per cent.

III. Wire and Wire Nails.—The Board held that as it appeared that wire rod, the main raw material for the manufacture of wire and wire nails, would not be manufactured in India for at least three years and as the debenture holders of the only company manufacturing wire in India, Indian Steel Wire Products, Limited had applied to the Trustees that the Company should be put into liquidation, the industry failed to qualify for protection. They, therefore, recommended that the protective duty on wire and wire nails should be discontinued until such time as the manufacture of wire rod in India was established on a commericial scale, when the question might be reconsidered.

Decision of the Government of India.—In a Resolution dated February 25th 1928, the Government of India accepted all the findings of the Tariff Board with the following exceptions. They found themselves unable to accept the recommendation that the maximum price for wagons should be the lowest approved price as shown in the tenders for wagons in November, 1925, and for underframes in April, 1926, plus an addition of 12½ per cent. and the appropriate charges for landing, wharfage, and erection. They considered that this addition would be appropriate only if the total orders to be placed in any one year were sufficient to keep the wagon building firms working to 60 per cent. of capacity and would be too low if the orders fell short of this figure. They, therefore, decided that tenders should in the first instance be called for only in India and the lowest tender should be accepted provided it were regarded as reasonable. Its reasonableness would be determined by comparison with the basic price of 1925 in respect of wagons and that of 1926 in respect of underframes and allowance, would be made either upwards or downwards for variations in steel prices and for the size of the orders to be placed. If the prices tendered were found to be unreasonably high for any type of wagon, the wagon building firms would be informed of the maximum price which the Government of India were prepared to pay and would be given an opportunity of accepting the order at that price. If they were unwilling to do so, simultaneous tenders would be called for in England and in India. In view, however, of the necessity for assisting the industry which arose from the fact that, with simultaneous tenders,

and a 10 per cent duty, there was a serious danger that orders would be lost to Indian firms, the Government of India decided that the rate of duty on wagons and underframes, and their component parts other than wheels, axles, vacuum brakes and certain other component parts which are not made in India, should be raised to the rates applicable to fabricated steel generally *viz.* 17 per cent. *ad valorem* if of British manufacture and 17 per cent. *ad valorem* plus Rs. 15 per ton if not of British manufacture. This increase in duty should have effect for three years only, at the end of which period it should again be possible to place orders on a normal scale. As regards steel castings, the Government of India held that the conditions justifying protection did not exist and were, therefore, unable to accept the bounty scheme recommended by the Board. They pointed out that, in addition to the Hukumchand Electric Steel Works, there was at least one other firm, the Kumardhubi Engineering Works which was equipped to produce steel castings from indigenous materials and that it appeared from the Board's own figures that the effective railway demand was barely sufficient to keep one firm fully employed. With two firms in the field, it would not be possible for either to obtain sufficient orders to bring down costs to an economic level, especially as some of the railways manufacture in part their own requirements.

Legislation giving effect to the Tariff Board's recommendations as modified by the Government of India was introduced in the Legislative Assembly in March 1928. That part of it relating to the increase in the duty on wagons and underframes and component parts was not, however, accepted by the Assembly. The proposals in regard to the imposition of a specific duty of Rs. 2 per cwt. on iron or steel bolts and nuts and the abolition of the protective duty of Rs. 60 per ton on certain kinds of iron or steel wire were passed into law as Act VIII of 1928.

Oil Industry.—The reference to the Tariff Board, in March 1928, of the question of granting protection to the oil industry was the outcome of representations received by the Government of India from a number of Companies engaged in the production of petroleum as to the effect of the price war which was then in progress between the Standard Oil Company of New York and the Royal Dutch Shell Group and which had been caused by the purchase by the Standard Oil Company from the Soviet Government of Russia of kerosene which the Royal Dutch Shell Group received rightfully belonged wholly or in part to them. It was represented to the Government of India that, as a result of this war, kerosene was being sold at prices well below world parity and it was from the serious losses consequent on these uneconomic prices that the Companies concerned asked for protection. The Tariff Board were directed :—

(1) to determine what price for kerosene should be taken to be equivalent to world parity at Indian ports and the extent to which current prices in India were below that level,

(2) to report whether it was in the national interest that protection against the dumping of imported kerosene should be given, and, if so, in what form and for what period, and

(3) to report whether it was likely that the price war would extend to petrol, what the consequences to the Indian producers were likely to be if it did and, in that case, what measures they would recommend.

In its report, which was submitted to the Government of India in June 1928, the majority of the Board held that the sale of kerosene in India below world parity as the result of the price war had been established. In arriving at this finding, they took the equivalent of world parity at Indian ports to mean not necessarily a fair selling price but the price of imported kerosene with reference to which the price of kerosene in India would be fixed ex-main installation in normal conditions. On this interpretation, they considered that the price should be determined by the f. o. b. American Gulf price plus freight from Gulf ports to India and incidental charges such as profit, storage, duty, etc. Taking inferior and superior kerosene in the same proportion as the Indian production, they estimated the equivalent of world parity at Indian ports at Rs. 4-8-4 per unit of 8 Imperial gallons in bulk. As the greater portion of the sales of kerosene in India was made by the Burmah Shell Oil Storage and Distributing Company of India, Limited, the Board held that the average price obtained by its ex-installaton from all areas in India, other than the economic areas of the Assam and Attock Oil Companies, nearly Rs. 3-10-9 per unit of 8 Imperial gallons in bulk, might fairly be taken as the current price of kerosene. This figure represented the price at which indigenous oil and imported oil were sold by the Burmah Shell Oil Storage and Distributing Company in the Indian market.

The reply of the majority of the Board to the second of its terms of reference was that no case had been made out for safeguarding the Indian Oil Industry against the sale of imported kerosene below world parity. Before arriving at this finding, the Board examined the present position of the production of oil in the various oil fields in India, and the financial position of the Oil Companies and also considered the various national interests affected by the Industry. As regards oil production, it found that the oils production in the main field in Burma, *viz.*, Yenangyaung, was now definitely on the decline and though in the Singu and Indaw fields in Burma, and in the Assam and Attock fields, there was the prospect of enhanced production, it was clearly a matter of considerable importance to the future oil production of India, that the Companies should be in a position to continue prospecting and development work. Its examination of the financial position of the Companies convinced it that profits had been considerably reduced and that the reduction might lead to some restoration of development work in the case of one or two companies. But it was satisfied that no premature closing of oil works would be necessary and that the present production of oil was not likely to be affected to any

in India reached a total of 5,000 annually in terms of the type of wagon known as C-2, all orders should be placed in India by competitive tender from Indian manufacturers. In view of the absence of foreign competition and the fact that there are now only three firms—Messrs Burn and Company, the Indian Standard Wagon Company and Messrs. Jessop and Company—manufacturing wagons in India, of which the first two are under the same management, the Board considered it advisable that maximum prices within which tenders could be accepted should be fixed. They accordingly recommended that subject to minor adjustments, maximum prices should be fixed at the level of the lowest c. i. f. price as shown in the tenders for wagons in November 1925, and for underframes in April 1926. To these prices, an addition of 12½ per cent should be made, representing the addition which the Board considered necessary to secure on the average a reasonable price whilst orders for rolling stock were restricted below the capacity of Indian manufacturers. The appropriate charges for landing, wharfage, etc., and erection should be added.

The Board also recommended that the question of the extent to which it was advisable to anticipate future requirements for wagons and underframes or to replace old rolling stock should be reconsidered. They suggested that, on the revival of the normal demand for rolling stock, the system of restricting orders to the capacity of the firm tendering, as certified by the Indian Stores Department should cease but that adequate penalties should be provided and enforced for late delivery.

II. Component parts.—(*a*) *Forgings.*—The Board considered that the manufacture of forgings should be regarded at present as merely a process incidental to the construction of wagons and not as a separate industry and that, in these circumstances, when the demand for wagons became normal, the same duty should be imposed on imported forgings as on wagons and underframes. The restriction of the demand for broad-gauge wagons meant, however, restriction of the demand for wagon forgings and the Board, therefore, suggested that orders for forgings as spare parts should continue to be placed in India as far as possible and that, in comparing Indian with foreign prices, an allowance of 2½ per cent. above the existing revenue duty of 10 per cent should be made.

(b) *Steel Castings and Spring Steel.*—The Board found that, since its first enquiry, the annual demand for steel castings had sufficiently increased to permit of an economic output. They, therefore, considered that a good case had been made out for protection. They considered that the best and most economical method of extending help to the industry was by means of a bounty and accordingly recommended that on all steel castings manufactured by the Hukumchand Electric Steel Works for railway wagons, underframes and locomotives during the period October 1st, 1927, to September 30th, 1930, a bounty of Rs. 2-8-0 per cwt. should be paid to the Company subject to a maximum of Rs. 1,80,000 for the whole period. Subject to this maximum, no restriction should be placed on the amount to be paid in any one year. No recommendation was made in respect of spring steel as it is not yet manufactured on a commercial basis and no reliable information as to the cost of production had been forthcoming.

(c) *Bolts and Nuts.*—The manufacture of bolts and nuts in India is at present on so small a scale that the Board did not consider present costs a guide to the amount of protection required if large scale production were undertaken. There appeared, however, good ground for the removal of the inequality of tariff treatment as between the Indian manufacturer and his foreign competitors which existed under the Tariff Schedule under which high specific duties were charged on the steel bars from which bolts and nuts are manufactured whereas the duty on imported bolts and nuts was only 10 per cent *ad valorem.* The Board, therefore, recommended that, on all bolts and nuts falling under Article 61 of the Statutory Tariff Schedule, a specific duty of Rs. 2 per cwt. should be levied in place of an *ad valorem* duty of 10 per cent.

III. Wire and Wire Nails.—The Board held that as it appeared that wire rod, the main raw material for the manufacture of wire and wire nails, would not be manufactured in India for at least three years and as the debenture holders of the only company manufacturing wire in India, Indian Steel Wire Products, Limited had applied to the Trustees that the Company should be put into liquidation, the industry failed to qualify for protection. They, therefore, recommended that the protective duty on wire and wire nails should be discontinued until such time as the manufacture of wire rod in India was established on a commericial scale, when the question might be reconsidered.

Decision of the Government of India.—In a Resolution dated February 25th 1928, the Government of India accepted all the findings of the Tariff Board with the following exceptions. They found themselves unable to accept the recommendation that the maximum price for wagons should be the lowest approved price as shown in the tenders for wagons in November, 1925, and for underframes in April, 1926, plus an addition of 12½ per cent. and the appropriate charges for landing, wharfage, and erection. They considered that this addition would be appropriate only if the total orders to be placed in any one year were sufficient to keep the wagon building firms working to 60 per cent. of capacity and would be too low if the orders fell short of this figure. They, therefore, decided that tenders should in the first instance be called for only in India and the lowest tender should be accepted provided it were regarded as reasonable. Its reasonableness would be determined by comparison with the basic price of 1925 in respect of wagons and that of 1926 in respect of underframes and allowance, would be made either upwards or downwards for variations in steel prices and for the size of the orders to be placed. If the prices tendered were found to be unreasonably high for any type of wagon, the wagon building firms would be informed of the maximum price which the Government of India were prepared to pay and would be given an opportunity of accepting the order at that price. If they were unwilling to do so, simultaneous tenders would be called for in England and in India. In view, however, of the necessity for assisting the industry which arose from the fact that, with simultaneous tenders

and a 10 per cent duty, there was a serious danger that orders would be lost to Indian firms, the Government of India decided that the rate of duty on wagons and underframes, and their component parts other than wheels, axles, vacuum brakes and certain other component parts which are not made in India, should be raised to the rates applicable to fabricated steel generally *viz.* 17 per cent. *ad valorem* if of British manufacture and 17 per cent. *ad valorem* plus Rs. 15 per ton if not of British manufacture. This increase in duty should have effect for three years only, at the end of which period it should again be possible to place orders on a normal scale. As regards steel castings, the Government of India held that the conditions justifying protection did not exist and were, therefore, unable to accept the bounty scheme recommended by the Board. They pointed out that, in addition to the Hukumchand Electric Steel Works, there was at least one other firm, the Kumardhubi Engineering Works which was equipped to produce steel castings from indigenous materials and that it appeared from the Board's own figures that the effective railway demand was barely sufficient to keep one firm fully employed. With two firms in the field, it would not be possible for either to obtain sufficient orders to bring down costs to an economic level, especially as some of the railways manufacture in part their own requirements.

Legislation giving effect to the Tariff Board's recommendations as modified by the Government of India was introduced in the Legislative Assembly in March 1928. That part of it relating to the increase in the duty on wagons and underframes and component parts was not, however, accepted by the Assembly. The proposals in regard to the imposition of a specific duty of Rs. 2 per cwt. on iron or steel bolts and nuts and the abolition of the protective duty of Rs. 60 per ton on certain kinds of iron or steel wire were passed into law as Act VIII of 1928.

Oil Industry.—The reference to the Tariff Board, in March 1928, of the question of granting protection to the oil industry was the outcome of representations received by the Government of India from a number of Companies engaged in the production of petroleum as to the effect of the price war which was then in progress between the Standard Oil Company of New York and the Royal Dutch Shell Group and which had been caused by the purchase by the Standard Oil Company from the Soviet Government of Russia of kerosene which the Royal Dutch Shell Group received rightfully belonged wholly or in part to them. It was represented to the Government of India that, as a result of this war, kerosene was being sold at prices well below world parity and it was from the serious losses consequent on these uneconomic prices that the Companies concerned asked for protection. The Tariff Board were directed :—

(1) to determine what price for kerosene should be taken to be equivalent to world parity at Indian ports and the extent to which current prices in India were below that level,

(2) to report whether it was in the national interest that protection against the dumping of imported kerosene should be given, and, if so, in what form and for what period, and

(3) to report whether it was likely that the price war would extend to petrol, what the consequences to the Indian producers were likely to be if it did and, in that case, what measures they would recommend.

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Oil Industry.—The reference to the Tariff Board, in March 1928, of the question of granting protection to the oil industry was the outcome of representations received by the Government of India from a number of Companies engaged in the production of petroleum as to the effect of the price war which was then in progress between the Standard Oil Company of New York and the Royal Dutch Shell Group and which had been caused by the purchase by the Standard Oil Company from the Soviet Government of Russia of kerosene which the Royal Dutch Shell Group received rightfully belonged wholly or in part to them. It was represented to the Government of India that, as a result of this war, kerosene was being sold at prices well below world parity and it was from the serious losses consequent on these uneconomic prices that the Companies concerned asked for protection. The Tariff Board were directed :—

(1) to determine what price for kerosene should be taken to be equivalent to world parity at Indian ports and the extent to which current prices in India were below that level,

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(3) to report whether it was likely that the price war would extend to petrol, what the consequences to the Indian producers were likely to be if it did and, in that case, what measures they would recommend.

In its report, which was submitted to the Government of India in June 1928, the majority of the Board held that the sale of kerosene in India below world parity as the result of the price war had been established. In arriving at this finding, they took the equivalent of world parity at Indian ports to mean not necessarily a fair selling price but the price of imported kerosene with reference to which the price of kerosene in India would be fixed ex-main installation in normal conditions. On this interpretation, they considered that the price should be determined by the f. o. b. American Gulf price plus freight from Gulf ports to India and incidental charges such as profit, storage, duty, etc. Taking inferior and superior kerosene in the same proportion as the Indian production, they estimated the equivalent of world parity at Indian ports at Rs. 4-8-4 per unit of 8 Imperial gallons in bulk. As the greater portion of the sales of kerosene in India was made by the Burmah Shell Oil Storage and Distributing Company of India, Limited, the Board held that the average price obtained by its ex-installaton from all areas in India, other than the economic areas of the Assam and Attock Oil Companies, nearly Rs. 3-10-9 per unit of 8 Imperial gallons in bulk, might fairly be taken as the current price of kerosene. This figure represented the price at which indigenous oil and imported oil were sold by the Burmah Shell Oil Storage and Distributing Company in the Indian market.

The reply of the majority of the Board to the second of its terms of reference was that no case had been made out for safeguarding the Indian Oil Industry against the sale of imported kerosene below world parity. Before arriving at this finding, the Board examined the present position of the production of oil in the various oil fields in India, and the financial position of the Oil Companies and also considered the various national interests affected by the Industry. As regards oil production, it found that the oils production in the main field in Burma, *viz.*, Yenangyaung, was now definitely on the decline and though in the Singu and Indaw fields in Burma, and in the Assam and Attock fields, there was the prospect of enhanced production, it was clearly a matter of considerable importance to the future oil production of India, that the Companies should be in a position to continue prospecting and development work. Its examination of the financial position of the Companies convinced it that profits had been considerably reduced and that the reduction might lead to some restoration of development work in the case of one or two companies. But it was satisfied that no premature closing of oil works would be necessary and that the present production of oil was not likely to be affected to any

considerable extent. A very considerable part of the reduction of the profits was due to the fall in prices of products other than kerosene due to overproduction in America but as American conditions improved, the effect would be reflected in prices in India. Since the prices of the various petroleum products: wax, petrol, turpentale, lubricating oil, jute batching oil and Diesel fuel, was not fixed but was variable within certain limits with little change in the cost of refining, it was probable that in this direction, the Indian Companies might to some extent obtain relief from the effects of the price war. The Board further held that although the price war might continue for some time, it appeared that the Royal Dutch Shell Group and the Indian Companies associated with it would endeavour to stabilise kerosene prices at or slightly above the then existing level. It held, therefore, that the most acute period in the price war was past. As regards the national interests affected by the Industry, its conclusion was that the price war in kerosene, whilst of immediate benefit to the consumer, would neither adversely affect Government revenues, nor seriously prejudice the future production of oil in India. On the other hand, the economic pressure resulting therefrom was likely to reduce the costs of production and lead to better utilisation and conservation of the mineral resources of the country. The absorption of one or more of the smaller Companies by the larger was not necessarily an evil since it would probably lead to a more methodical and scientific system of drilling with better recovery of petrol and better utilisation of gas as a source of power. Whilst the Board held that no case had been made out for safeguarding the Indian Oil Industry against the sale of imported kerosene below world parity, it considered that the recent reductions in railway freight on petrol and other oil products would seriously affect the Attock Oil Company's position in competing with foreign oil, since these reductions did not apply to the transport of oil within the economic area served by the Attock Oil Company. It commended the point to the careful consideration of the Government of India.

The reply of the majority of the Board to the third of its terms of reference was that it was improbable that foreign petrol would be imported into India on any considerable scale within two years. Whilst it was impossible to foresee what the market arrangements between the various Companies would be at the end of that period or to determine whether the price war would extend to petrol, the Board held that no immediate measures were called for.

The President of the Tariff Board, Sir P. P. Ginwala, submitted a separate report in which he dissented from the finding of his colleagues under all three heads though he agreed with them that no case had been established for the grant of protection in any form either as regards kerosene or petrol. He held that the average prices of imported kerosene from September, 1927, to the date of the Board's report, had not fallen below American parity and that no dumping, that is, the sale of imported kerosene below American parity had, therefore, been established. The real equivalent of world parity at Indian ports, in his view, was the price at which, under competitive conditions, kerosene was or could be imported on a commercial scale. Russian oil had been so imported and landed in India, duty paid at Rs. 3-10-7 per unit for superior and Rs. 3-7-11 for superior and inferior combined. On these figures, the indigenous industry had been realising prices very considerably above world prices. Sir P. P Ginwala further held that there was evidence that during the six months between January and July, 1927, an additional burden of more than Rs. 1¼ crores had been thrown on the consumer by the indigenous industry and the foreign importers by the selling prices being in excess of American parity. There was also evidence which suggested that all petroleum products were being sold in India at exorbitant prices owing to oil business being in the hands of Oil Trusts, and that the consumer had to pay a sum which might amount to Rs. 5 crores per annum in excess of economic prices. He considered it in the national interest that the subject should be further explored with the object of bringing about a reduction in the exorbitant prices of petroleum products. He suggested the importation of crude oil and the erection of refineries by Rupee Companies, particularly in Bombay, or the control by Government of prices as a possible line of action which might result in the lowering of prices. As regards petrol, he held that a shortage might lead to a rate war though it was difficult to predict its date or the turn it would take.

Decision of the Government of India.—In a Resolution dated September 12th, 1928, by which time the price war between the Standard Oil Company of New York and the Royal Dutch Shell Group had come to an end, the Government of India considered that the following points had been established :—

(1) The average price realised by the Standard Oil Company for all kerosene imported by it into India between Septembder, 1927, and March, 1928, was Rs. 4-15-2 per unit and this price was above world parity, whatever criterion was adopted to determine its level. The Standard Oil Company imported only superior kerosene.

(2) There was no evidence that the Standard Oil Company took the initiative anywhere in India in cutting prices or did more than follow, to an extent which varied in different localities, the cuts made by the Burmah Shell Company, which is the selling agency of the Asiatic Petroleum Company (representing the Royal Dutch Shell Group) and of the companies in India which were members of the Kerosene Pool, and also of the Anglo-Persian Oil Company.

(3) The average price realised by the Asiatic Petroleum Company for superior kerosene imported by it into India during the same period was Rs. 3-13-6 per unit. This price was lower, by more than one rupee per unit, than the average price realised by the Standard Oil Company and was below world parity, whatever criterion was adopted, unless the very low price said to have been paid by the Standard Oil Company for Russian kerosene were taken as the basis.

(4) It followed that the only Company that could be considered to have sold imported kerosene at prices below world parity was the Company which was working in closest alliance with the principal producer in India and not the Company against whichthe application for protection was originally directed.

The Government of India also commented on the mention in the majority and minority reports of the Tariff Board of the failure of the applicant companies who were members of the Kerosene Pool to disclose in their representation to them the important fact that the Royal Dutch Shell Group had recognised their claim to compensation for losses suffered as a result of the price war. It appeared that an agreement on this subject had been reached prior to the date on which the Government of India made the reference to the Tariff Board but although this important fact was material to the issue whether there was a *prima facie* case for an enquiry or not, it had not been brought to the notice of the Government of India at any time. The existence of a subsequent agreement by which the Burmah Oil Company undertook to make good to the other Indian members of the Pool, the remainder of their losses as measured by the difference between Indian and American prices had been disclosed at the end of the enquiry. In the face of these agreements, the Government of India stated that it would have been impossible for them to consider the grant of further assistance to the companies which were members of the Pool. If the price war had not ended, it would have been necessary to consider whether any steps should be taken to safeguard the two companies which were not members of the Pool, the Indo-Burma Petroleum Company and the Attock Oil Company. As the price war had ended, it was unnecessary to arrive at any conclusion on the point but the Government of India accepted the finding of the Board that no case had been made out for safeguarding any company against the sale of imported kerosene below world parity. They also accepted the finding tbat petrol was not likely to be imported into India on any considerable scale during the next two years and that no action was called for.

Match Industry.—The question of protection to the match industry was referred to the Tariff Board in October 1926, as the result of the progressive decline in the customs revenue derived from matches. The duty on matches was raised to Rs. 1-8-0 per gross in March 1922 which represents a duty of more than 100 per cent. *ad valorem*. This high duty had naturally a protective effect. Numerous match factories were established in India and, concurrently, the customs revenue on matches which amounted to Rs. 154 lakhs in 1922-23 fell to Rs. 118 lakhs in 1925-26.

The Tariff Board was directed to report whether the conditions laid down by the Fiscal Commission were satisfied by the match industry and whether the industry should be protected. If the answer to that question were in the affirmative, the Board was directed to report at what rate the import duty should be fixed in order to give the protection required and whether alternative measures of protection could suitably be adopted. If the answer were in the negative, the Board was directed to report to what extent vested interests had been created in India as the result of the existing rate of duty, how far these interests required consideration and what prospect there was of the match industry establishing itself, if the existing rate of duty were maintained. If the Board decided that vested interests required the maintenance of the duty at the existing rate, it was further to report whether the loss of customs duty could be made up in whole or in part by any other appropriate form of taxation of the industry.

In its report, which was submitted to Government in April 1928, the Board pointed out that, under the stimulus of the high revenue duty, the Match industry in India had made striking progress. At the date of its report, there were 27 factories in existence with a capacity of 500 gross a day or over and their total capacity amounted to about 18 million gross matches annually. The imports of matches had declined from 13·68 million gross in 1921-22 to 6·13 million gross in 1926-27. This rapid expansion had been accompanied by a large reduction in costs, partly due to increased output and the introduction of up-to-date machinery but mainly to the improved efficiency of Indian labour.

In determining the fair selling price of Indian matches and the price of imported matches against which they had to compete, the Board took half size matches as representative of the industry as a whole as these constituted the bulk of the Indian production as well as of the imports. It based its estimate of the fair selling price on the costs of the Swedish Match Company's factory at Ambernath as this factory is the largest unit in the Match industry in India and is engaged solely in the production of half size matches. It is also the only match factory in India, the costs of which are kept on a regular cost accounting system. On this basis, the Board estimated the present fair selling price, f. o. r. works (including dealers' commission) of half size matches manufactured in India from imported aspen for splints and Indian wood for boxes at Rs. 1-4-0.94 per gross and from Indian wood for both splints and boxes at Rs. 1-2-7.43 per gross. The future fair selling prices were estimated at Rs. 1-2-5·60 per gross and Rs. 1-2-2·21 per gross, respectively. The Board pointed out that the costs of several of the larger factories under Indian control were lower than those of the Swedish Match Company. The present fair selling price which they had estimated on the basis of the costs of the Ambernath factory was thus more than sufficient to enable Indian manufacturers to secure a normal return on their capital. The Board found that the price at which imported half size matches had been sold in Bombay, excluding duty but including landing and importation charges and dealers' commission was as low as 11 annas 10 pies per gross. The price f.o.r. works in Sweden corresponding to this price would probably not exceed 7½ *d.* which it considered an uneconomical price. In its view, a duty free price of Rs. 1-1-4¾ per gross might be regarded as a fair price for imported half size matches in India.

The Board found that the Indian Match Industry satisfied all the conditions laid down by the Fiscal Commission. It possessed two important natural advantages in the possession of a large home market and the existence of a supply of cheap labour. The Board estimated the present consumption of matches in India at 17 million gross a year and held that in this respect India had a distinct advantage over foreign manufacturers. As regards labour, it pointed out that the machinery employed in the manufacture of matches is largely of a simple and automatic character and can be operated efficiently by Indian workmen. The cheapness of Indian labour, therefore, gave the industry an advantage over Sweden. On the other hand, certain materials such as chemicals were not available in India but it had to be remembered that so far as the Match industry was concerned, no country could claim to possess all or most of the materials required. Again, where aspen was used in the manufacture of splints, the price of wood was higher in India than Sweden but this disadvantage was counterbalanced by the freight and the costs incidentalto the importation of matches. As regards supplies of wood in India, the Board found that there was an assured supply of Indian timber in Burma, Bengal, Assam, the United Provinces and the Punjab, sufficient for the manufacture of half the total demand in India. It suggested that local governments within whose territories match factories of any size or importance had been established should adopt a cautious programme of plantation with reference to the probable future requirements of the factories and that a definite research project into the Match industry should be drawn up at the Forest Research Institute, Dehra Dun.

As regards the condition laid down by the Fiscal Commission, that an industry granted protection must be one which without the help of protection is either not likely to develop at all or is not likely to develop so rapidly as is desirable in the interests of the country, the Board found that, even on the present fair selling price as estimated by it, Indian matches should, other things being equal, be able to compete against imported matches with the ordinary revenue duty of 15 per cent. The need for protection arose from the fact that imported matches were sold at uneconomical prices and that there existed a marked prejudice against Indian matches, which, in the case of the best Indian factories, was not justified by any differences of quality.

As for the third condition laid down by the Fiscal Commission that the industry must be one which will eventually be able to face world competition without protection, the Board reported that its estimate of future economies had been based on conservative lines and that it had no doubt that the Match industry would eventually be able to dispense with protection if there were no unfair competition and if the prejudice against Indian matches gradually disappeared.

As regards the measure of protection required, the Board reported that, *prima facie*, this might be estimated at 9 annas per gross, this being approximately the difference between the present fair selling price of Indian half size matches consisting of aspen splints and Indian wood boxes and the duty free landed price of imported half size matches. To this, however, should be added a margin sufficient to secure for Indian matches in the retail market an advantage sufficient to cover the prejudice against them. In view of the limitations imposed by the minimum monetary unit in use in the match trade (the pice) which rendered it essential that there should be a difference in the retail market of at least one pice per unit of sale if the Indian match were to retain any advantage over the imported match, and having regard to the possibility of variations in the middleman's profit, the Board recommended that the present revenue duty of Rs. 1-8-0 per gross should be maintained and converted into a protective duty. In view of the fact that the prices of Indian matches are now determined by internal competition and that a fairly long period must be allowed for working out any scheme of plantation, no limit to the period of protection was suggested.

The Board did not consider that the manufacture of matches was a fit industry for development on cottage lines, especially in view of the dangerous character of some of the materials employed in it but suggested that, if an excise duty were imposed on matches manufactured in India, a reduction not exceeding 2 annas per gross should be made in the case of cottage factories in consideration of their limited resources.

The Board found that there was no ground for the complaint that the Swedish Match Company had engaged in unfair competition with factories under Indian control by systematically selling the products of their Indian factories at uneconomical prices. On the other hand, these were generally sold at higher prices than matches made by Indian manufacturers. Uneconomical prices had, however, been charged for imported half size matches. The Board did not find that the interests of the Indian industry had been jeopardized by the activity of the Company or that the existence of its factories in India had been prejudicial to the national interest. On the contrary, it held strongly that the elimination of the Swedish Match Company from India would be to the advantage neither of the industry nor of the country as a whole. It did not think that, in present circumstances, any action was called for against the Swedish Match Company on the ground of unfair competition but in view of the vast resources of the Company and the policy pursued by them in other countries, considered it advisable that future developments of the Company in India should be watched. Should such developments indicate that the Company was acquiring undue control to the detriment of the Indian industry, it recommended that Government should take steps to safeguard the latter. It considered that, if the industry were declared protected, the Swedish Match Company should take steps at the earliest possible opportunity, to organise its business in India on the basis of an Indian Company under the control of a local directorate with suitable Indian representation on it.

Finally, the Board pointed out that, if the scheme of protection were successful, the Government revenue from matches which, in 1923-24 stood at Rs. 138 lakhs was likely to fall to about Rs. 17 lakhs. In these circumstances, an excise duty might, if necessary, be imposed on match factories in India. It refrained from recommending any definite rate of duty as this must depend on the Government's financial requirements but suggested that, if an excise duty were levied, it should be accompanied by a corresponding increase in the import duty so as not to trench on the degree of protection afforded to the industry. In levying the duty, care should be taken to fix it at such a level as to absorb as far as possible the whole of the increase in price.

Decision of the Government of India.—In a Resolution dated September 1st, 1928, the Government of India accepted all the findings of the Tariff Board. In doing so, they stated that, if it became evident that the Swedish Match Company had definitely adopted a policy of supplying the Indian market by matches made in India, and if it appeared that the prejudice against the Indian match, similar in quality to the imported match was disappearing, the amount of the duty would require reconsideration. They added that, if it appeared probable that the Swedish Match Company would obtain a monopoly of the manufacture and sale of matches in India, this would create a new situation which would necessitate an examination of the position. They also stated that they did not contemplate the imposition of an excise duty on matches at present.

Legislation converting the revenue duty of Rs. 1-8-0 per gross on matches in boxes containing on an average not more than 100 matches and of six annas for every 25 matches or fraction thereof in boxes containing on the average more than 100 matches into a protective duty and imposing a protective duty of 4 annas 6 pies per pound on undipped splints and of six annas per pound on veneers ordinarily used for making boxes was passed at the September Session of the Imperial Legislature as Act XVII of 1928.

COPYRIGHT.

There is no provision of law in British India for the registration of Copyright. Protection for Copyright accrues under the Indian Copyright Act under which there is now no registration of rights, but the printer has to supply copies of these works as stated in that Act and in the Printing Presses and Books Act XXV of 1867. The Indian Copyright Act made such modifications in the Imperial Copyright Act of 1911 as appeared to be desirable for adapting its provisions to the circumstances of India. The Imperial Act of 1911 was brought into force in India by proclamation in the *Gazette of India* on October 30, 1912. Under s. 27 of that Act there is limited power for the legislature of British possessions to modify or add to the provisions of the Act in its application to the possession, and it is under this power that the Indian Act of 1914 was passed. The portions of the Imperial Act applicable to British are scheduled to the Indian Act. The Act to which these provisions are scheduled makes some formal adaptations of them to Indian law and procedure, and some material modifications of them in their applications, translations and musical compositions. In the case of works first published in British India the sole right to produce, reproduce, perform or publish a translation is, subject to an important proviso, to subsist only for ten years from the first publication of the work. The provisions of the Act as to mechanical instruments for producing musical sounds were found unsuitable to Indian conditions. "The majority of Indian melodies," it was explained in Council, "have not been published, *i.e.*, written in staff notation, except through the medium of the phonograph. It is impossible in many cases to identify the original composer or author, and the melodies are subject to great variety of notation and tune. To meet these conditions s. 5 of the Indian Act follows the English Musical Copyright Act of 1902 by defining musical work as meaning any combination of melody and harmony, or either of them, printed, reduced to writing, or otherwise graphically produced or reproduced."

Customs Tariff.

General import duties are levied for fiscal purposes and not for the protection of Indian industries. But the tariff has been modified with a view to admitting free or at favourable rates articles, the cheap import of which was considered necessary in the interests of the country. Thus certain raw materials, manures, agricultural implements and dairy appliances are admitted free. Machinery, printing materials, etc. are assessed at 2½ per cent. and iron and steel railway material and ships at 10 per cent. High duties are imposed on tobacco, liquors and matches.

Re-Imports.—Articles of foreign production on which import duty has been once paid, if subsequently exported, are on re-import exempted from duty on the following conditions:—

The Collector of Customs must be satisfied—

(1) of the identity of the articles;

(2) that no drawback of duty was paid on their export;

(3) that the ownership has not changed between the time of re-export and subsequent re-import;

(4) that they are private personal property re-imported for personal use, not merchandise for sale;

(5) that not more than three years have passed since they were re-exported.

Duty is, however, charged on the cost of repairs done to the articles while abroad which should be declared by the person re-importing the articles in a form which will be supplied to him at the time of re-importation.

To facilitate identification on re-importation an export certificate giving the necessary particulars should be obtained from the Customs Department at the time of shipment of the articles which should be tendered for examination.

This concession of free entry on re-importation is not extended for the benefit of Companies or Corporate Bodies.

Drawbacks.—When any goods, capable of being easily identified which have been imported by sea into any Customs port from any foreign port, and upon which duties of Customs have been paid on importation, are re-exported by sea from such Customs port to any foreign port, or as provisions or stores for use on board a ship proceeding to a foreign port, seven-eights of such duties shall, except as otherwise hereinafter provided, be repaid as drawback:

Provided that, in every such case, the goods be identified to the satisfaction of the Customs Collector at such Customs port and that the re-export be made within two years from the date of importation, as shown by the records of the Custom House, or within such extended term as the Chief Customs Authority, or Chief Customs Officer on sufficient cause being shown, in any case determines, provided further that the Chief Customs Officer shall not extend the term to a period exceeding 3 years.

When any goods, having been charged with Import duty at one Customs port and thence exported to another, are re-exported by sea as aforesaid, drawback shall be allowed on such goods as if they had been so re-exported from the former port:

Provided that, in every such case, the goods be identified to the satisfaction of the Officer-in-Charge of the Custom House at the port of final exportation, and that such final exportation be made within three years from the date on which they were first imported into British India.

No drawback shall be allowed unless the claim to receive such drawback be made and established at the time of re-export.

No such payment of drawback shall be made until the vessel carrying the goods has put out to sea, or unless payment be demanded within six months from the date of entry for shipment.

Every person, or his duly authorised agent, claiming drawback on any goods duly exported, shall make and subscribe a declaration that such goods have been actually exported, and have not been re-landed and are not intended to be re-landed at any Customs port; and that such person was at the time of entry outwards and shipment, and continues to be, entitled to drawback thereon.

Merchandise Marks.—Importers into India especially from countries other than the United Kingdom, would do well to make themselves acquainted with the law and regulations relating to merchandise marks. In Appendix II will be found the principal provisions of the Indian Merchandise Marks Act, 1889, and connected Acts and the notifications issued thereunder. The following summary of the regulations in force does not claim to be exhaustive. For those seeking more complete information a reference is suggested to the Merchandise Marks Manual which is published under the authority of the Government of India and obtainable of all agents for the sale of Indian Government publications.

Infringements or offences may be classified conveniently under four heads:—

1. Counterfeit trade marks;
2. Trade descriptions that are false in respect of the country of origin;
3. Trade descriptions that are false in other respects; and
4. Lengths not properly stamped on piece goods.

Schedule II—(Import Tariff).

NOTE 1.—In the expression "*ad valorem*" used in these Schedules the reference is to "real value" as defined in Section 30 of the Sea Customs Act, 1878 (VIII of 1878), unless an article has a tariff value assigned to it.

NOTE 2.—Tariff valued heads are based on the ordinary trade description of each article and cover all reduced grades and mixtures unless they are separately provided for.

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	I.—Food, Drink and Tobacco.			
	FISH.			
1	FISH, SALTED, wet or dry	Indian maund of 82$\frac{2}{7}$ lbs. avoirdupois weight.	....	Such rate or rates of duty not exceeding one rupee as the Governor-General in Council may, by notification in the *Gazette of India*, from time to time prescribe.*
2	FISH, excluding salted fish (*see* Serial No. 1) ..	....	*Ad valorem*	15 per cent.
3	FISHMAWS, including singally and sozille, and sharkfins.	....	,,	15 ,, ,,
	FRUITS AND VEGETABLES.			
3A	CURRANTS	cwt.	....	Re. 1-4.
4	FRUITS AND VEGETABLES, all sorts, fresh, dried, salted or preserved not otherwise specified.	....	,,	15 per cent.
	Tariff values.—		Rs. a.	
	Almonds, without shell	cwt.	90 0	15 ,, ,,
	,, kàgazi Persian in the shell ..	,,	80 0	15 ,, ,,
	,, in the shell Persian	,,	18 0	15 ,, ,,
	Cashew or cajoo kernels	,,	25 0	15 ,, ,,
	Cocoanuts, Straits, Dutch. East Indies and Siam.	thousand.	97 0	15 ,, ,,
	,, Maldives	,,	31 0	15 ,, ,,
	,, other	,,	45 0	15 ,, ,,
	,, kernel (khopra)	cwt.	23 0	15 ,, ,,
	Dates, dry, in bags	,,	11 0	15 ,, ,,
	,, wet, in bags, baskets and bundles ..	,,	4 12	15 ,, ,,
	,, ,, in pots, boxes, tins and crates ..	,,	11 8	15 ,, ,,
	Figs, dried, Persian	,,	10 0	15 ,, ,,
	,, ,, European	,,	18 0	15 ,, ,,
	Garlic	,,	7 4	15 ,, ,,
	Pistachio nuts	,,	65 0	15 ,, ,,
	Raisins, Red, Persian Gulf	,,	12 0	15 ,, ,,

* The rate on the 1st January, 1923 and until further notice is annas 7½.

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General import duties are levied for fiscal purposes and not for the protection of Indian industries. But the tariff has been modified with a view to admitting free or at favourable rates articles, the cheap import of which was considered necessary in the interests of the country. Thus certain raw materials, manures, agricultural implements and dairy appliances are admitted free. Machinery, printing materials, etc. are assessed at 2½ per cent. and iron and steel railway material and ships at 10 per cent. High duties are imposed on tobacco, liquors and matches.

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Provided that, in every such case, the goods be identified to the satisfaction of the Officer-in-Charge of the Custom House at the port of final exportation, and that such final exportation be made within three years from the date on which they were first imported into British India.

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2.—Tariff valued heads are based on the ordinary trade description of each article and cover all reduced grades and mixtures unless they are separately provided for.

	Names of Articles.	Per	Tariff Valuation.	Duty.
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	FISH.			
1	FISH, SALTED, wet or dry	Indian maund of 82⁶⁄₇ lbs. avoirdupois weight.	....	Such rate or rates of duty not exceeding one rupee as the Governor-General in Council may, by notification in the *Gazette of India*, from time to time prescribe.*
2	FISH, excluding salted fish (*see* Serial No. 1) ..	....	*Ad valorem*	15 per cent.
3	FISH MAWS, including singally and sozille, and sharkfins.	....	,,	15 ,, ,,
	FRUITS AND VEGETABLES.			
4	CURRANTS	cwt.	....	Re. 1-4.
4	FRUITS AND VEGETABLES, all sorts, fresh, dried, salted or preserved not otherwise specified.	....	,,	15 per cent.
	Tariff values.—		Rs. a.	
	Almonds, without shell	cwt.	90 0	15 ,, ,,
	,, kàgazi Persian in the shell ..	,,	80 0	15 ,, ,,
	,, in the shell Persian	,,	18 0	15 ,, ,,
	Cashew or cajoo kernels	,,	25 0	15 ,, ,,
	Cocoanuts, Straits, Dutch. East Indies and Siam.	thousand.	97 0	15 ,, ,,
	,, Maldives	,,	31 0	15 ,, ,,
	,, other	,,	45 0	15 ,, ,,
	,, kernel (khopra)..	cwt.	23 0	15 ,, ,,
	Dates, dry, in bags	,,	11 0	15 ,, ,,
	,, wet, in bags, baskets and bundles ..	,,	4 12	15 ,, ,,
	,, ,, in pots, boxes, tins and crates ..	,,	11 8	15 ,, ,,
	Figs, dried, Persian	,,	10 0	15 ,, ,,
	,, ,, European	,,	18 0	15 ,, ,,
	Garlic	,,	7 4	15 ,, ,,
	Pistachio nuts	,,	65 0	15 ,, ,,
	Raisins, Red, Persian Gulf	,,	12 0	15 ,, ,,

* The rate on the 1st January, 1928 and until further notice is annas 7½.

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	I.—Food, Drink and Tobacco—*contd.*		Rs. a.	
	GRAIN, PULSE AND FLOUR.			
5	FLOUR except sago flour	....	*Ad valorem*	15 per cent.
	Tariff value— Cassava or Topioca flour	Cwt.	9 8 15	15 „
6	GRAIN AND PULSE, all sorts, including broken grains and pulse, but excluding flour (see Serial No. 5 and 7).	....	....	Free.
7	SAGO FDOUR	....	....	Free.
	LIQUORS.			Rs. a. p.
8	ALE, Beer, Porter, Cider and other fermented liquors.	Imperial gallon or 6 quart bottles.	....	0 8 0
9	DENATURED SPIRIT	....	*Ad valorem*	7½ per cent.
10	PERFUMED SPIRITS	Imperial gallon or 6 quart bottles.	....	Rs. 36 or 15 per cent. *Ad valorem* whichever is higher.
11	LIQUEURS, Cordials, Mixtures and other preparations containing spirit—			
	(*a*) Entered in such a manner as to indicate that the strength is not to be tested.	Ditto.	....	Rs. 30 or 15 per cent. *Ad valorem* whichever is higher.
	(*b*) If tested	Imperial gallon or 6 quart bottles of the strength of London proof.	....	Rs. 21-14 and the duty to be increased or reduced in proportion as the strength of the spirit exceeds or is less than London proof or 15 per cent. *Ad valorem*, whichever is higher.
12	All other sorts of SPIRIT	Ditto	....	Ditto.
13	WINES—			Rs. a. p.
	Champagne and all other sparkling wines not containing more than 42 per cent. of proof spirit.	Imperial gallon or 6 quart bottles.	....	9 0 0
	All other sorts of wines not containing more than 42 per cent. of proof spirit.	Ditto.	....	4 8 0
	Provided that all sparkling and still wines containing more than 42 per cent. of proof spirit shall be liable to duty at the rate applicable to "All other sorts of Spirit."			

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	I.—Food, Drink and Tobacco—*contd.*		Rs. a. p.	
	PROVISIONS AND OILMAN'S STORES.			
14	PROVISIONS & OILMAN'S STORES, AND GROCERIES, all sorts, excluding vinegar in casks (*see* Serial No. 15).	....	*Ad valorem*	15 per cent.
	Tariff values.—			15 per cent.
	Butter	lb.	1 10 0	15 ,, ,,
	Cassava, Tapioca or Sago (whole)	cwt.	11 8 0	15 ,, ,,
	China preserves in syrup	Box of 6 large or 12 small jars.	3 8 0	15 ,, ,,
	,, ,, dry, candied	lb.	0 6 0	15 ,, ,,
	,, canned fruit	case of 4 dozen.	14 0 0	15 ,, ,,
	Cocum	cwt.	7 0 0	15 ,, ,,
	Ghi	,,	68 0 0	15 ,, ,,
	Vegetable product	lb.	0 6 0	15 ,, ,,
	Vermicelli, flour, from China and the Far East	Cwt.	26 0 0	15 ,, ,,
	,, Peas ,, ,, ,, ,, ,, ,,	,,	31 0 0	15 ,, ,,
	,, Rice ,, ,, ,, ,, ,, ,,	,,	16 8 0	15 ,, ,,
	Yeast, from China and the Far East ..	,,	28 0 0	15 ,, ,,
15	VINEGAR, in casks	....	*Ad valorem*	2½ ,, ,,
	SACCHARINE.			
16	SACCHARINE (except in tablets)	lb.	....	Rs. a. p. 5 0 0
17	SACCHARINE TABLETS	...	*Ad valorem*	15 per cent. or Rs. 5 per pound of Saccharine Contents, whichever is higher.
	SPICES.			
18	SPICES, all sorts—	....	*Ad valorem*	15 per cent.
	Tariff values.—			
	Betelnuts (husked)—			
	Raw, or boiled whole, from Goa	cwt.	20 0 0	15 per cent.
	,, ,, ,, ,, Straits, Dutch East Indies and Siam.	,,	14 0 0	15 ,,
	Raw, whole, from Ceylon	,,	22 0 0	15 ,,
	Raw, split (sun-dried) from Ceylon ..	,,	35 0 0	15 ,,
	Boiled, split or sliced	,,	26 0 0	15 ,,
	Chillies, dry	,,	25 0 0	15 ,,
	Cloves	,,	52 0 0	15 ,,
	,, exhausted	,,	11 0 0	15 ,,
	,, stems and heads	,,	7 0 0	15 ,,
	,, in seeds, narlavang	,,	20 0 0	15 ,,
	Ginger, dry	,,	33 0 0	15 ,,
	Mace	lb.	2 0 0	15 ,,
	Nutmegs	,,	0 14 0	15 ,,
	,, in shell	,,	0 8 0	15 ,,
	Pepper, black	cwt.	90 0 0	15 ,,
	,, long	,,	95 0 0	15 ,,
	,, white	,,	105 0 0	15 ,,

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
			Rs. a. p.	
	I.—Food, Drink and Tobacco—*contd.*			
	SUGAR.			
19	CONFECTIONERY	....	*Ad valorem*	30 per cent.
20	SUGAR, excluding confectionery (*see* Serial No. 19)-			Rs. a.
	(1) Sugar, crystallised or soft 23 Dutch Standard and above	cwt.	....	4 8
	(2) Sugar, crystallised or soft inferior to 23 Dutch Standard but not inferior to 8 Dutch Standard	„	....	4 0
	(3) Sugar, below 8 Dutch Standard, molasses and sugar candy.	....	*Ad valorem*	25 per cent.
	Tariff values.—			
	Molasses—			
	(*i*) imported in bulk by tank steamer ..	cwt.	1 10 6	25 „ „
	(*ii*) otherwise imported	„	2 2 0	25 „ „
	Sugar Candy	„	18 0 0	25 „ „
	TEA.			
21	TEA	....	*Ad valorem*	15 „ „
	Tariff values.—			
	Tea, black	lb.	0 11 6	15 „ „
	„ green	„	1 2 0	15 „ „
	OTHER FOOD AND DRINK.			
22	COFFEE	....	*Ad valorem*	15 „ „
	Tariff value.—			
	Coffee, other than roasted or ground ..	cwt.	55 0 0	15 „ „
23	HOPS	....	....	Free.
24	SALT, excluding Salt exempted under Serial No. 25	Indian maund of 82$\frac{2}{7}$ lbs. avoirdupois weight.	....	The rate at which excise duty is for the time being leviable on salt manufactured in the place where the import takes place.*

* The rate of excise duty on the 1st January 1929 and until further notice is Rs. 1-4-0.

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	I.—Food, Drink and Tobacco—*contd.*		Rs. a. p.	
	OTHER FOOD AND DRINK—*contd.*			
25	SALT imported into British India and issued, in accordance with rules made with the previous sanction of the Governor-General in Council, for use in any process of manufacture ; also salt imported into the port of Calcutta and issued with the sanction of the Government of Bengal to manufacturers of glazed stoneware ; also salt imported into any port in the provinces of Bengal and Bihar and Orissa and issued, in accordance with rules made with the previous sanction of the Governor-General in Council, for use in curing fish in those provinces. (For the general duty on salt, *see* Serial No. 24.)	....	....	Free.
26	ALL OTHER SORTS OF FOOD AND DRINK not otherwise specified.	....	*Ad valorem*	15 per cent.
	TOBACCO.			
27	CIGARS	....	,,	75 ,, ,,
				Rs. a. p
28	CIGARETTES of value—			
	(*a*) not exceeding Rs. 10-8 per thousand ..	thousand.	....	7 0 0
	(*b*) exceeding Rs. 10-8 per thousand ..	,,	....	10 8 0
	Note.—For the purposes of this item, 'value' means real value as defined in Section 30 of the Sea Customs Act, 1878, provided that the amount to be deducted on account of duties payable on importation to determine the real value in accordance with the provisions of clause (*a*) of the said Section shall be Rs. 7 per thousand.			
29	TOBACCO, unmanufactured	lb.	....	1 8 0
30	All other sorts of TOBACCO, manufactured.. ..	,,	....	2 4 0
	II.—Raw materials and produce and articles mainly unmanufactured.			
	COAL, COKE AND PATENT FUEL.			
31	COAL, COKE AND PATENT FUEL	ton.	....	0 8 0
	GUMS, RESINS AND LAC.			
32	STICK OR SEED LAC	....	....	Free.
33	GUMS, RESINS AND LAC, all sorts, not otherwise specified (*see* Serial No. 32).	....	*Ad valorem*	15 per cent.
	Tariff values.—			
	Gambier, block and cube	cwt.	20 0 0	15 ,, ,,
	,, in flakes or circular pieces ..	,,	50 0 0	15 ,, ,,
	Gum Ammoniac	,,	35 0 0	15 ,, ,,
	,, Arabic	,,	25 0 0	15 ,, ,,
	,, Benjamin, ras	,,	30 0 0	15 ,, ,,
	,, ,, cowrie..	,,	60 0 0	15 ,, ,,
	,, Bysabol (coarse myrrh)	,,	32 0 0	15 ,, ,,
	,, Dammer (or Copal)	,,	40 0 0	15 ,, ,,
	,, Olibanum or frankincense	,,	12 0 0	15 ,, ,,
	,, Persian (false)	,,	14 0 0	15 ,, ,,
	Myrrh	,,	33 0 0	15 ,, ,,
	Rosin	,,	16 0 0	15 ,, ,,

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff valuation.	Duty.
	II.—Raw materials and produce and articles mainly unmanufactured— *contd.*		Rs. a. p.	
	HIDES AND SKINS, RAW.			
34	HIDES AND SKINS, raw or salted..	....	....	Free.
	METALLIC ORES AND SCRAP IRON OR STEEL FOR RE-MANUFACTURE.			
35	IRON OR STEEL, old..	....	*Ad valorem*	10 per cent.
	Tariff value.—			
	Iron or Steel, old	cwt.	1 12 0	10 „ „
36	METALLIC ORES, all sorts, except ochres and other pigment ores.	....	....	Free.
	OILS.			Rs. a. p.
37	KEROSENE, also any mineral oil ochres than kerosene and motor spirit which has its flashing point below one hundred degrees of Fahrenheit's thermometer by Abel's close test.	Imperial gallon.	....	0 2 6
38	MOTOR SPIRIT	„	....	0 4 0
39	MINERAL OIL—			
	(1) which has its flashing point at or above two hundred degrees of Fahrenheit's thermometer, and is ordinarily used for the batching of jute or other fibre.	ton.	....	10 0 0
	(2) which has its flashing point at or above two hundred degrees of Fahrenheit's thermometer, and is such as is not ordinarily used for any other purpose than for lubrication;	Imperial gallon.	....	0 1 4
	(3) which has its flashing point at or above one hundred and fifty degrees of Fahrenheit's thermometer, and is such as is not ordinarily used except as fuel or for some sanitary or hygienic purposes.	....	*Ad valorem*	7½ per cent.
	Tariff value.—			
	Mineral oil which has its flashing point at or above one hundred and fifty degrees of Fahrenheit's thermometer, and is such as is not ordinarily used except as fuel or for some sanitary or hygienic purposes if imported in bulk.	ton.	45 0 0	7½ „ „
40	All sorts of animal, essential, mineral, and vegetable non-essential oil not otherwise specified (see Serial Nos. 37, 38 and 39).	....	*Ad valorem*	15 „ „
	Tariff Values.—			
	Cassia oil	lb.	2 8 0	15 „ „
	Citronella oil	„	1 12 0	15 „ „
	Cocoanut oil	cwt.	30 0 0	15 „ „
	Kajiputty oil	lb.	1 14 0	15 „ „
	Linseed oil, raw or boiled	Imperial gallon.	3 3 0	15 „ „
	Peppermint oil	lb.	6 8 0	15 „ „
	SEEDS.			
41	OIL-SEEDS, imported into British India by sea from the territories of any Prince or Chief in India.	....	....	Free.
42	SEEDS, all sorts, not otherwise specified	....	*Ad valorem*	15 per cent.

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	II.—Raw materials and produce and articles mainly unmanufactured—*contd.*		Rs. a. p.	
	TALLOW, STEARINE AND WAX.			
43	TALLOW	....	....	Free.
44	All sorts of stearine, wax, grease and animal fat not otherwise specified.	....	*Ad valorem*	15 per cent.
	Tariff values.—			
	Mineral grease	lb.	0 3 6	15 per cent.
	Vegetable wax	cwt.	55 0 0	15 ,, ,,
	TEXTILE MATERIALS.			
45	COTTON, raw	....	....	Free.
46	TEXTILE MATERIALS, the following	....	*Ad valorem*	15 per cent.
	Silk waste, and raw silk including cocoons, raw flax, hemp, jute and all other unmanufactured textile materials not otherwise specified.	..		
	Tariff values.—			
	Coir fibre	cwt.	9 0 0	15 ,, ,,
	Hemp, raw	,,	30 0 0	15 ,, ,,
	Silk, raw—			
	(*a*) Bokhara	lb.	12 0 0	15 ,, ,,
	(*b*) Chinese—			
	Mathow	,,	4 8 0	15 ,, ,,
	Panjam	,,	3 0 0	15 ,, ,,
	White Shanghai, Thonkoon or Duppion	,,	4 0 0	15 ,, ,,
	,, ,, other kinds	,,	6 0 0	15 ,, ,,
	,, other kinds	,,	6 8 0	15 ,, ,,
	Yellow Shanghai	,,	5 8 0	15 ,, ,,
	,, other kinds	,,	6 0 0	15 ,, ,,
	(*c*) Persian	,,	8 0 0	15 ,, ,,
	(*d*) Siam	,,	5 12 0	15 ,, ,,
47	WOOL, raw, and wool-tops	....	....	Free.
	WOOD AND TIMBER.			
48	FIREWOOD	....	*Ad valorem*	2½ per cent.
49	WOOD AND TIMBER, all sorts, not otherwise specified, including all sorts of ornamental wood.	....	,,	15 ,, ,,
	MISCELLANEOUS.			
50	CANES AND RATTANS	....	,,	15 ,, ,,
	Tariff values.—			
	Canes—			
	Malacca	100 pieces.	24 0 0	15 ,, ,,
	Chimity	,,	11 0 0	15 ,, ,,
	Tries	,,	8 0 0	15 ,, ,,
	Root Moonah	,,	26 0 0	15 ,, ,,
	Mannu	,,	18 0 0	15 ,, ,,
	Polo, all kinds	,,	45 0 0	15 ,, ,,
	Tohite	cwt.	27 8 0	15 ,, ,,

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff valuation.	Duty.
	II.—Raw materials and produce and articles mainly unmanufactured— *contd.*		Rs. a. p.	
	HIDES AND SKINS, RAW.			
34	HIDES AND SKINS, raw or salted..	....	....	Free.
	METALLIC ORES AND SCRAP IRON OR STEEL FOR RE-MANUFACTURE.			
35	IRON OR STEEL, old..	....	*Ad valorem*	10 per cent.
	Tariff value.—			
	Iron or Steel, old	cwt.	1 12 0	10 „ „
36	METALLIC ORES, all sorts, except ochres and other pigment ores.	....	....	Free.
	OILS.			Rs. a. p.
37	KEROSENE, also any mineral oil ochres than kerosene and motor spirit which has its flashing point below one hundred degrees of Fahrenheit's thermometer by Abel's close test.	Imperial gallon.	....	0 2 6
38	MOTOR SPIRIT	„	....	0 4 0
39	MINERAL OIL—			
	(1) which has its flashing point at or above two hundred degrees of Fahrenheit's thermometer, and is ordinarily used for the batching of jute or other fibre.	ton.	....	10 0 0
	(2) which has its flashing point at or above two hundred degrees of Fahrenheit's thermometer, and is such as is not ordinarily used for any other purpose than for lubrication;	Imperial gallon.	....	0 1 4
	(3) which has its flashing point at or above one hundred and fifty degrees of Fahrenheit's thermometer, and is such as is not ordinarily used except as fuel or for some sanitary or hygienic purposes.	....	*Ad valorem*	7½ per cent.
	Tariff value.—			
	Mineral oil which has its flashing point at or above one hundred and fifty degrees of Fahrenheit's thermometer, and is such as is not ordinarily used except as fuel or for some sanitary or hygienic purposes if imported in bulk.	ton.	45 0 0	7½ „ „
40	All sorts of animal, essential, mineral, and vegetable non-essential oil not otherwise specified (see Serial Nos. 37, 38 and 39).	....	*Ad valorem*	15 „ „
	Tariff Values.—			
	Cassia oil	lb.	2 8 0	15 „ „
	Citronella oil	„	1 12 0	15 „ „
	Cocoanut oil	cwt.	30 0 0	15 „ „
	Kajiputty oil	lb.	1 14 0	15 „ „
	Linseed oil, raw or boiled	Imperial gallon.	3 3 0	15 „ „
	Peppermint oil	lb.	6 8 0	15 „ „
	SEEDS.			
41	OIL-SEEDS, imported into British India by sea from the territories of any Prince or Chief in India.	....	....	Free.
42	SEEDS, all sorts, not otherwise specified	....	*Ad valorem*	15 per cent.

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	II.—Raw materials and produce and articles mainly unmanufactured—*contd.*		Rs. a. p.	
	TALLOW, STEARINE AND WAX.			
43	TALLOW	....	....	Free.
44	All sorts of stearine, wax, grease and animal fat not otherwise specified.	....	*Ad valorem*	15 per cent.
	Tariff values.—			
	Mineral grease	lb.	0 3 6	15 per cent.
	Vegetable wax	cwt.	55 0 0	15 ,, ,,
	TEXTILE MATERIALS.			
45	COTTON, raw	....	....	Free.
46	TEXTILE MATERIALS, the following	....	*Ad valorem*	15 per cent.
	Silk waste, and raw silk including cocoons, raw flax, hemp, jute and all other unmanufactured textile materials not otherwise specified.	..		
	Tariff values.—			
	Coir fibre	cwt.	9 0 0	15 ,, ,,
	Hemp, raw	,,	30 0 0	15 ,, ,,
	Silk, raw—			
	(*a*) Bokhara	lb.	12 0 0	15 ,, ,,
	(*b*) Chinese—			
	Mathow	,,	4 8 0	15 ,, ,,
	Panjam	,,	3 0 0	15 ,, ,,
	White Shanghai, Thonkoon or Duppion	,,	4 0 0	15 ,, ,,
	,, ,, other kinds	,,	6 0 0	15 ,, ,,
	,, other kinds	,,	6 8 0	15 ,, ,,
	Yellow Shanghai	,,	5 8 0	15 ,, ,,
	,, other kinds	,,	6 0 0	15 ,, ,,
	(*c*) Persian	,,	8 0 0	15 ,, ,,
	(*d*) Siam	,,	5 12 0	15 ,, ,,
47	WOOL, raw, and wool-tops	....	....	Free.
	WOOD AND TIMBER.			
48	FIREWOOD	....	*Ad valorem*	2½ per cent.
49	WOOD AND TIMBER, all sorts, not otherwise specified, including all sorts of ornamental wood.	....	,,	15 ,, ,,
	MISCELLANEOUS.			
50	CANES AND RATTANS	....	,,	15 ,, ,,
	Tariff values.—			
	Canes—			
	Malacca	100 pieces.	24 0 0	15 ,, ,,
	Chimity	,,	11 0 0	15 ,, ,,
	Tries	,,	8 0 0	15 ,, ,,
	Root Moonah	,,	26 0 0	15 ,, ,,
	Mannu..	,,	18 0 0	15 ,, ,,
	Polo, all kinds	,,	45 0 0	15 ,, ,,
	Tohite	cwt.	27 8 0	15 ,, ,,

Schedule II—(Import Tariff)—*continued.*

Serial No	Names of Articles.	Per	Tariff Valuation.	Duty.
	II.—Raw materials and produce and articles mainly unmanufactured—*contd.*			
	MISCELLANEOUS—*contd.*		Rs. a. p.	
	RATTANS—			
	Chair	cwt.	20 0 0	15 per cent.
	Basket	,,	10 8 0	15 ,, ,,
	Outers	,,	75 0 0	15 ,, ,,
	Inners	,,	53 0 0	15 ,, ,,
51	COWRIES AND SHELLS	..	*Ad valorem*	15 ,, ,,
	Tariff values.—			
	Cowries, bazar, common	cwt.	6 0 0	15 ,, ,,
	,, yellow, superior quality	,,	8 0 0	15 ,, ,,
	,, Maldive	,,	21 0 0	15 ,, ,,
	,, Sankhli	,,	100 0 0	15 ,, ,,
	Mother-of-pearl, nacre	,,	22 0 0	15 ,, ,,
	Nakhla	,,	120 0 0	15 ,, ,,
	Tortoise-shell	lb.	10 0 0	15 ,, ,,
	,, nakh	,,	2 0 0	15 ,, ,,
52	IVORY, unmanufactured	....	*Ad valorem*	15 ,, ,,
	Tariff values.—			
	Elephants' grinders	cwt.	300 0 0	15 ,, ,,
	Elephant's tusks (other than hollows, centres and points), each exceeding 20 lb. in weight, and hollows, centres and points each weighing 10 lb. and over.	,,	850 0 0	15 ,, ,,
	Elephants' tusks (other than hollows, centres and points), not less than 10 lb. and not exceeding 20 lb. each, and hollows, centres and points, each weighing less than 10 lb.	,,	700 0 0	15 ,, ,,
	Elephants' tusks, each less than 10 lb. (other than hollows, centres and points).	,,	400 0 0	15 ,, ,,
	Sea-cow or moye teeth, each not less than 4 lbs.	,,	275 0 0	15 ,, ,,
	Sea-cow or moye teeth, each not less than 3 lbs. and under 4 lbs.	,,	220 0 0	15 ,, ,,
	Sea-cow or moye teeth, each less than 3 lbs.	,,	130 0 0	15 ,,
53	MANURES, all sorts, including animal bones and the following chemical manures:—Basic slag, nitrate of ammonia, nitrate of soda, muriate of potash, sulphate of ammonia, sulphate of potash, kainit salts, carbo lime, urea, nitrate of lime, calcium cyanamide, mineral phosphates and mineral superphosphates. *	....	....	Free.
54	PRECIOUS STONES, unset and imported uncut, and Pearls, unset.	..	..	,,
55	PRECIOUS STONES, unset and imported cut (*see* Serial No. 54).	..	*Ad valorem*	15 per cent.
56	PULP OF WOOD, rags and other paper-making materials.	..	..	Free.
57	RUBBER STUMPS, rubber seeds and raw rubber ..	..	..	,,
58	All other raw materials and produce and articles mainly unmanufactured, not otherwise specified.†	..	*Ad valorem*	15 per cent.

* **Under Government of India,** (Central Revenues) **Notification No. 26, dated** the 5th May 1928, the following chemicals manure, namely, ammonium phosphates, is **exempt from payment** of import duty.

† Under Government of India, Notification No. 4317, dated the 2nd July 1921, unmanufactured Mica is exempt from payment of import duty.

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured.			
	APPAREL.			
59	APPAREL, including drapery, boots and shoes and military and other uniforms and accoutrements, but excluding uniforms and accoutrements exempted from duty under Serial No. 60 and gold and silver thread and articles made of silk or silk mixtures.	..	*Ad valorem*	15 per cent.
60	UNIFORMS AND ACCOUTREMENTS appertaining thereto imported by a public servant for his personal use.	..	..	Free.
	ARMS; AMMUNITION AND MILITARY STORES.			
61	Subject to the exemptions specified in Serial No. 64,—			
	(1) Firearms, including gas and air guns, gas and air rifles and gas and air pistols, not otherwise specified (*see* Serial Nos. 65 and 165.)	each.	..	Rs. 15 } or 30 per cent. *ad valorem*, whichever is higher.
	(2) Barrels for the same, whether single or double.	,,	..	Rs. 15
	(3) Main springs and magazine springs for firearms, including gas guns, gas rifles and pistols.	,,	..	Rs. 5
	(4) Gun stocks and breech blocks	,,	..	Rs. 3
	(5) Revolver-cylinders, for each cartridge they will carry.	,,	..	Rs. 2
	(6) Actions (including skeleton and waster) breech bolts and their heads, cocking pieces, and locks for muzzle loading arms.	,,	..	Re. 1
	(7) Machines for making, loading, or closing cartridges for rifled arms.	..	*Ad valorem*	30 per cent.
	(8) Machines for capping cartridges for rifled arms.	..	,,	30 ,, ,,
62	GUNPOWDER for cannon, rifles, guns, pistols and sporting purposes.	..	,,	50 ,, ,,
63	SUBJECT TO THE EXEMPTIONS SPECIFIED in Serial No. 64 all articles other than those specified in Serial Nos. 61, 65 and 165 which are arms or parts of arms within the meaning of the Indian Arms Act, 1878 (excluding springs used for air-guns which are dutiable as hardware under Serial No. 84), all tools used for cleaning or putting together the same, all machines for making, loading, closing or capping cartridges for arms other than rifled arms and all other sorts of ammunition and military stores, and any articles which the Governor-General in Council may, by notification in the *Gazette of India*, declare to be ammunition or military stores for the purposes of this Act.	..	,,	30 ,, ,,

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	ARMS, AMMUNITION AND MILITARY STORES—*contd.*			
64	The following ARMS, AMMUNITION AND MILITARY STORES :—	....	....	F. ec.
	(*a*) Articles falling under the 3rd, 4th, 6th, 7th or 8th sub-head of Serial No. 61, when they appertain to a firearm falling under that item and are fitted into the same case with such firearms			
	(*b*) Arms forming part of the regular equipment of a commissioned or gazetted officer in His Majesty's Service entitled to wear diplomatic, military, naval, Royal Air Force or police uniform ;			
	(*c*) A revolver and an automatic pistol and ammunition for such revolver and pistol up to a maximum of 100 rounds per revolver or pistol (*i*) when accompanying a commissioned officer of His Majesty's regular forces or of the Indian Auxiliary Force or the Indian Territorial Force or a Gazetted Police Officer, or (*ii*) certified by the commandant of the corps to which such Officer belongs, or, in the case of an Officer not attached to any Corps, by the Officer Commanding the Station or District in which such Officer is serving, or in the case of a Police Officer by an Inspector-General or Commissioner of Police, to be imported by the Officer for the purpose of his equipment ;			
	(*d*) Swords for presentation as Army or Volunteer Prizes ;			
	(*e*) Arms, ammunition and Military Stores imported with the sanction of the Government of India for the use of any portion of the Military Forces of a State in India being a unit notified in pursuance of the first Schedule to the Indian Extradition Act, 1903.			
	(*f*) Morris tubes and patent ammunition imported by Officers Commanding British and Indian Regiments or Volunteer Corps for the instruction of their men.			
65	ORNAMENTAL ARMS of an obsolete pattern possessing only an antiquarian value ; masonic and theatrical and fancy dress swords, provided they are virtually useless for offensive or defensive purposes ; and *dahs* intended exclusively for domestic, agricultural and industrial purposes.	....	*Ad valorem.*	15 per cent.
66	EXPLOSIVES, namely, blasting gunpowder, blasting gelatine, blasting dynamite, blasting roburite, blasting tonite, and all other sorts, including detonators and blasting fuse.	....	„	15 „ „

Schedule II—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	CHEMICALS, DRUGS AND MEDICINES.			
67	ANTI-PLAGUE SERUM	..	..	Free.
68	BLEACHING PASTE and bleaching powder ..	..	..	,,
69	COPPERAS, green	..	*Ad valorem*	2½ per cent.
	Tariff value.—			
	Copperas, green, if imported in bulk	cwt.	4 0 0	2½ ,, ,,
70	OPIUM and its alkaloids and their derivatives ..	seer of 80 tolas.	..	Rs. 24 or 15 per cent. *ad valorem*, whichever is higher.
71	CINCHONA BARK and the alkaloids extracted therefrom including Quinine and alkaloids derived from other sources which are chemically identical with alkaloids extracted from cinchona bark.	..	..	Free.
72	MAGNESIUM CHLORIDE	..	..	,,
73	SULPHUR	..	..	,,
74	CHEMICALS, Drugs and Medicines, all sorts, not otherwise specified.	..	*Ad valorem.*	15 per cent.
	Tariff values.—			
	Alkali, Indian (sajji-khar)	cwt.	4 12 0	15 ,, ,,
	Alum (lump)	,,	6 0 0	15 ,, ,,
	Ammonia gas, auhydrons	lb.	0 12 0	15 ,, ,,
	Ammonium carbonate or bicarbonate ..	cwt.	27 0 0	15 ,, ,,
	Ammonium chloride—			
	Muritate of Ammonia, crystalline	,,	16 0 0	15 ,, ,,
	Salammoniac, sublimed	,,	25 0 0	15 ,, ,,
	Other sorts, including compressed	,,	20 0 0	15 ,, ,,
	Arsenic (China mansil)	,,	70 0 0	15 ,, ,,
	Calcium carbide	,,	16 0 0	15 ,, ,,
	,, chloride	,,	4 8 0	15 ,, ,,
	Carbonic acid gas	lb.	0 3 0	15 ,, ,,
	Chlorine gas	,,	0 4 6	15 ,, ,,
	Copper sulphate	cwt.	19 0 0	15 ,, ,,
	Epsom salts (in bulk)	,,	3 8 0	15 ,, ,,
	Peppermint crystals	oz.	1 0 0	15 ,, ,,
	Potassium bichromate	cwt.	27 0 0	15 ,, ,,
	Soda, ash, including calcined natural soda and manufactured sesqui-carbonates.	,,	6 0 0	15 ,, ,,
	Soda Caustic flake	,,	15 0 0	15 ,, ,,
	,, ,, powdered	,,	15 8 0	15 ,, ,,
	,, ,, solid	,,	10 8 0	15 ,, ,,
	,, crystals (in bulk)	,,	7 0 0	15 ,, ,,
	Sodium, bicarbonate	,,	8 0 0	15 ,, ,,
	,, bichromate	,,	21 8 0	15 ,, ,,
	Sodium silicate (in liquid form)	,,	8 0 0	15 ,, ,,
	,, Sulphide	,,	8 0 0	15 ,, ,,
	Trona or natural soda uncalcined	,,	3 8 0	15 ,, ,,
	Asafœtida (hing)	,,	110 0 0	15 ,, ,,
	,, coarse (hingra)	,,	30 0 0	15 ,, ,,

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	CHEMICALS DRUGS AND MEDICINES—*contd.*			
	Tariff values—contd.	lbs.		
	Banslochan (bamboo camphor)	cwt.	1 2 0	15 per cent
	Calumba root	lb.	8 0 0	15 ,,
	Camphor, refined, other than powder	,,	1 14 0	15 ,,
	,, powder, other than synthetic	,,	1 10 0	15 ,,
	,, synthetic, tablets and slabs	,,	1 13 0	15 ,,
	Camphor, synthetic, powder	cwt.	1 6 0	15 ,,
	Cassia lingnea	,,	17 8 0	15 ,,
	China root (Chobchini) rough	,,	20 0 0	15 ,,
	,, ,, ,, scraped	,,	30 0 0	15 ,,
	Cubebs	,,	85 0 0	15 ,,
	Galangal, China	,,	16 0 0	15 ,,
	Salep	,,	225 0 0	15 ,,
	Storax, liquid (rose mellos or salaras)		32 0 0	15 ,,
	CONVEYANCES.			
75	COAL TUBS, tipping wagons and the like conveyances designed for use on light rail track, if adapted to be worked by manual or animal labour and if made mainly of iron or steel; and component parts thereof made of iron or steel—			
	(*a*) if of British manufacture	ton	..	Rs. 21 or 17 per cent. *ad valorem* whichever is higher
	(*b*) if not of British manufacture	ton	..	Rs. 21 or 17 per cent. *ad valorem*, whichever, is higher, *plus* Rs. 15 per ton.
76	CONVEYANCES not SPECIFIED in Serial No. 75, namely, tramcars, motor-omnibuses, motor-lorries, motor vans, passenger lifts, carriages, carts, jinrikshas, bath-chairs, perambulators, trucks, wheelbarrows, bicycles, tricycles and all other sorts of conveyances not otherwise specified, and component parts and accessories thereof, except such parts and accessories of the motor vehicles above-mentioned as are also adapted for use as parts or accessories of motor cars, motor cycles or motor scooters (*see* Serial No. 77).	....	*Ad valorem*	15 per cent.
77	MOTOR CARS, MOTOR CYCLES, and MOTOR SCOOTERS, and articles (other than rubber tyres and tubes) adapted for use as parts and accessories thereof: provided that such articles as are ordinarily also used for other purposes than as parts and accessories of motor vehicles included in this item or in Serial No. 76 shall be dutiable at the rate of duty specified for such articles.	....	*Ad valorem*	20 per cent.

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	CUTLERY, HARDWARE, IMPLEMENTS AND INSTRUMENTS.			
78	The following Agricultural Implements, namely, winnowers, threshers, mowing and reaping machines, binding machines, elevators, seed and corn crushers, chaff-cutters, root-cutters, ensilage-cutters, horse and bullock gears, ploughs, cultivators, scarifiers, harrows, clod-crushers, seed-drills, hay-tedders, hay presses, potato diggers, latex spouts, spraying machines, beet pulless, broadcast seeders, corn pickers, corn shellers, culti-packers, drag scrappers, stalk cutters, huskers and shredders, potato planters, lime sowers, manure spreaders, listers soil graders and rakes; also agricultural tractors; also component parts of these implements, machines or tractors, provided that they can be readily fitted into their proper places in the implements, machines or tractors for which they are imported, and that they cannot ordinarily be used for purposes unconnected with agriculture.	....	....	Free.
79	ARTICLES plated with gold and silver excluding surgical instruments.	....	*Ad valorem*	30 per cent.
80	CLOCKS and WATCHES and parts thereof	....	*Ad valorem*	30 per cent.
81	CUTLERY, excluding plated cutlery (*see* Serial No. 79).	....	*Ad valorem*	15 per cent.
82	The following Dairy Appliances, namely, cream separators, milking machines, milk sterilizing or pasteurizing plant, milk aerating and cooling apparatus, churns, butter dryers, and butter workers; also component parts of these appliances, provided that they can be readily fitted into their proper places in the appliances for which they are imported, and that they cannot ordinarily be used for other than dairy purposes.	....	....	Free.
83	ELECTRICAL CONTROL GEAR AND TRANSMISSION GEAR, namely, switches, fuses and current-breaking devices of all sorts and descriptions, designed for use in circuits of less than ten *amperes* and at a pressure not exceeding 250 volts, and regulators for use with motors designed to consume less than 187 watts; bare or insulated copper wires and cables, any one core of which has a sectional area of less than one-eightieth part of a square inch, and wires and cables of other metals of not more than equivalent conductivity; and line insulators, including also cleats, connectors, leading in tubes and the like, of types and sizes such as are ordinarily used in connection with the transmission of power for other than industrial purposes, and the fittings thereof.	....	*Ad valorem*	15 per cent.

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	CUTLERY, HARDWARE, IMPLEMENTS AND INSTRUMENTS—*contd.*			
84	HARDWARE, ironmongery and tools, all sorts, not otherwise specified.	....	*Ad valorem*	15 per cent
	Tariff value.			
	Crown corks	gross	0 13 0	15 per cent.
85	INSTRUMENTS, apparatus and appliances, imported by a passenger as part of his personal baggage and in actual use by him in the exercise of his profession or calling.	....	....	Free.
86	MUSICAL INSTRUMENTS and parts thereof ..	....	*Ad valorem*	30 per cent.
87	TELEGRAPHIC INSTRUMENTS and APPARATUS, and parts thereof imported by, or under the orders of a Railway Administration.	....	*Ad valorem*	10 per cent.
88	WATER-LIFTS, sugar-mills, oil-presses, and parts thereof, when constructed so that they can be worked by manual or animal power.	....	....	Free.
89	All other sorts of implements, instruments, apparatus and appliances (including plated surgical instruments) and parts thereof, not otherwise specified. †	....	*Ad valorem*	15 per cent.
	DYES AND COLOURS.			
90	DYES derived from coal-tar and coal-tar derivatives used in any dyeing process.	....	....	Free.
91	DYEING and Tanning Substances, all sorts not otherwise specified and paints and colours and painters' materials, all sorts.	....	*Ad valorem*	15 per cent.
	Tariff values.			
	Avar bark	cwt.	4 8 0	15 per cent.
	Cochineal	lb.	1 12 0	15 "
	Gallnuts, Persian	cwt.	40 0 0	15 "
	Gamboge	lb.	2 2 0	15 "
	Turmeric	cwt.	25 0 0	15 "
	Vermillion, Canton	box of 90 bundles.	240 0 0	15 "
	FURNITURE, CABINETWARE AND MANUFACTURES OF WOOD.			
92	FURNITURE, Cabinetware and all other manufactures of wood not otherwise specified.	....	*Ad valorem*	15 per cent.

† Under Government of India, Finance Department (Central Revenues) Notification No. 96-1—Cus.-25, dated the 28th February 1925, apparatus for wireless telegraphs designed either for transmission or reception whether by telegraphy or telephony (including component parts of such apparatus which are essential for its working and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose), when imported in accordance with the orders for the time being governing the importation of such apparatus, is liable to duty at 2½ per cent. *ad valorem.*

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs a. p.	
	GLASSWARE AND EARTHENWARE.			
93	GLASS and GLASSWARE, lacquered ware, earthenware, china and porcelain; all sorts except glass bangles and beads and false pearls (*see* Serial No. 94).	....	*Ad valorem*	15 per cent.
	Tariff values.			
	Aerated water bottles, empty—			
	Codd's pattern—			
	Under 10 ozs.	gross.	28 0 0	15 per cent.
	10 ozs.	,,	30 0 0	15 ,,
	Over 10 ozs.	,,	34 0 0	15 ,,
	Crown cork pattern—			
	7 ozs. and under	,,	18 0 0	15 ,,
	Over 7 ozs. up to and including 10 ozs. ..	,,	20 0 0	15 ,,
	Over 10 ozs.	,,	24 0 0	15 ,,
94	GLASS BANGLES and beads and false pearls ..	....	*Ad valorem*	30 per cent.
	Tariff values.			
	Glass Bangles—			
	China—			
	Nimuchi and pasalal	100 pairs	2 0 0	30 per cent.
	Bracelet, Jadi and fancy, all kinds ..	,,	4 0 0	30 ,,
	Rajawarakh, all kinds	,,	7 0 0	30 ,,
	Japan—			
	Reshmi or lustre, plain or fancy, all colours—			
	Vakmel or zigzag	doz. pairs.	0 2 0	30 per cent.
	All others	,,	0 1 0	30 ,,
	Hollow or tube all colours	,,	0 2 9	30 ,,
	Sonerikada (golbala)—			
	Containing gold in their composition..	,,	1 0 0	30 ,,
	All others	,,	0 3 0	30 ,,

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	HIDES AND SKINS AND LEATHER.			
95	HIDES and SKINS not otherwise specified, Leather and Leather Manufactures, all sorts, not otherwise specified.	....	*Ad valorem*	15 per cent.
	MACHINERY.			
96	MACHINERY, namely, such of the following articles as are not otherwise specified :—	....	....	Free.
	(1) prime-movers, boilers, locomotive engines and tenders for the same, portable engines (including power-driven road rollers, fire engines and tractors), and other machines in which the prime-mover is not separable from the operative parts;			
	(2) machines and sets of machines to be worked by electric, steam, water, fire or other power, not being manual or animal labour, or which before being brought into use require to be fixed with reference to other moving parts;			
	(3) apparatus and appliances, not to be operated by manual or animal labour, which are designed for use in an industrial system as parts indispensable for its operation and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose;			
	(4) control gear, self-acting or otherwise, and transmission-gear designed for use with any machinery above specified, including belting of all materials (other than cotton, hair and canvas ply) and driving chains, but excluding driving ropes not made of cotton;			
	(5) bare hard-drawn electrolytic copper wires and cables and other electrical wires and cables, insulated or not; and poles, troughs, conduits and insulators designed as parts of a transmission system, and the fittings thereof.			
	NOTE.—The term "industrial system" used in sub-clause (3) means an installation designed to be employed directly in the performance of any process, or series of processes necessary for the manufacture production or extraction of any commodity.			

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	MACHINERY—*contd.*			
97	The following textile machinery and apparatus by whatever power operated, namely, healds, heald cords and heald knitting needles; reeds and shuttles; warp and weft preparation machinery and looms; bobbins and pirns; dobbies; Jacquard machines; Jacquard harness linen cords; Jacquard cards; punching plates for Jacquard cards; warping mills; multiple box sleys; solid border sleys; tape sleys; swivel sleys; tape looms; wool carding machines; wool spinning machines; hosiery machinery; coir mat shearing machines; coir fibre willowing machines; heald knitting machines; dobby cards; lattices and lags for dobbies; wooden winders; silk looms; silk throwing and reeling machines; cotton yarn reeling machines; sizing machines; doubling machines; silk twisting machines; cone winding machines; piano card cutting machines; harness building frames; card lacing frames; drawing and denting hooks; sewing thread balls making machines; cumbli finishing machinery; hank boilers; cotton carding and spinning machines; mail eyes, lingoes, comber boards and comber board frames; take-up motions; temples and pickers; picking bands; picking sticks; printing machines; roller cloth; clearer cloth; sizing flannel; and roller skins.	....	....	Free.
98	Printing and Lithographic Material, namely: presses, lithographic plates, composing sticks, chases, imposing tables, lithographic stones, stereo-blocks, wood blocks, half-tone blocks, electrotype blocks, roller moulds, roller frames and stocks, roller composition, standing screw and hot presses, perforating machines, gold blocking presses, galley presses, proof presses, arming presses, copper plate printing presses, rolling presses, ruling machines, ruling pen making machines, lead cutters, rule cutters, slug cutters, type casting machines, type setting and casting machines, rule bending machines, rule mitreing machines, bronzing machines, stereotyping apparatus, paper folding machines, and paging machines, but excluding ink and paper.*	....	....	Free.
99	Component Parts of Machinery, as defined in Serial Nos. 96, 97 and 98, namely, such parts only as are essential for the working of the machine or apparatus and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose :	....	....	Free.

* Under Government of India, Finance Department (Central Revenues) Notifications No. 43, dated the 25th August 1928, and No. 46, dated the 15th September 1928, the following printing material, namely, process blocks and highly polished copper or zinc sheets specially prepared for making process blocks, and paper in rolls with side-perforations to be used after further perforation for type-casting, are exempt from payment of import duty.

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	MACHINERY—*concld.*			
	Provided that articles which do not satisfy this condition shall also be deemed to be component parts of the machine to which they belong if they are essential to its operation and are imported with it in such quantities as may appear to the Collector of Customs to be reasonable.			
99A	Cotton, hair and canvas ply belting for machinery..	....	*Ad valorem*	5 per cent.
100	MACHINERY and component parts thereof, meaning machines or parts of machines to be worked by manual or animal labour, not otherwise specified and any machines (except such as are designed to be used exclusively in industrial processes) which require for their operation less than one quarter of one brake-horse-power.	....	„	15 „
	METALS, IRON AND STEEL.			
101A	IRON alloys	....	*Ad valorem*	10 per cent.
101B	IRON ANGLE, channel and tee—			
	(*a*) fabricated, all qualities—			
	(*i*) of British manufacture	ton.	....	Rs. 21 or 17 per cent. *ad valorem* whichever is higher.
	(*ii*) not of British manufacture	„	....	Rs. 21 or 17 per cent. *ad valorem* whichever is higher, *plus* Rs. 15 per ton.
	(*b*) not fabricated, kinds other than galvanized, tinned or lead-coated and other than Crown or superior qualities—			Rs. a. p.
	(*i*) of British manufacture	ton.	....	19 0 0
	(*ii*) not of British manufacture	„	....	30 0 0
101C	IRON ANGLE, channel and tee not otherwise specified (*see* Serial No. 101*b*).	....	*Ad valorem*	10 per cent.
	Tariff values.—			
	Angle, channel and tee— Crown and superior qualities, not fabricated	ton.	200 0 0	10 per cent.
	Other kinds, not fabricated, if galvanized, tinned, or lead-coated.	„	200 0 0	10 „

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*	..	Rs. a. p.	
	METALS, IRON AND STEEL—*contd.*			Rs. a. p
101 D	IRON, common bar not galvanized, tinned or lead-coated if not of any shape and dimension specified in clause (*a*) or clause (*c*) of Serial No 102*c*—			
	(*i*) of British manufacture	ton.	....	26 0 0
	(*ii*) not of British manufacture	,,	....	37 0 0
101E	IRON BAR AND ROD not otherwise specified (*see* Serial No. 101*d*).	....	*Ad valorem*	10 per cent.
	Tariff values.— Bar and rod—			
	Qualities superior to Grade A of the British Engineering Standard Association.	ton.	350 0 0	10 ,,
	Grade A of the British Engineering Standard Association and Crown quality and intermediate qualities—			
	Over ½ inch in diameter or thickness..	,,	190 0 0	10 ,,
	½ inch and under in diameter or thickness.	,,	220 0 0	10 ,,
	Common, if galvanized, tinned, or lead-coated.	,,	200 0 0	10 ,,
101F	IRON PIG	....	*Ad valorem.*	10 ,,
	Tariff value.— Iron, pig	ton.	75 0 0	10 ,,
101G	IRON rice bowls	....	*Ad valorem*	10 ,,
	Tariff value.— Iron rice bowls	cwt.	20 0 0	10 ,,
102A	STEEL, angle and see if galvanized, tinned or lead-coated.	....	*Ad valorem*	10 ,,
	Tariff value.— Angle and tee, if galvanized, tinned or lead-coated, not fabricated.	ton.	200 0 0	10 ,,
102B	STEEL angle and tee, not otherwise specified (*see* Serial No. 102*a*) and beam, channel, zed, trough and piling—			
	(*a*) fabricated—			
	(*i*) of British manufacture	ton.	....	Rs. 21 or 17 per cent. *ad valorem*, whichever is higher.
	(*ii*) not of British manufacture	ton.	....	Rs. 21 or 17 per cent. *ad valorem*, whichever is higher, *plus* Rs. 15 per ton.
	(*b*) not fabricated—			Rs. a. p.
	(*i*) of British manufacture	ton.	....	19 0 0
	(*ii*) not of British manufacture	,,	....	30 0 0

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	METALS, IRON AND STEEL—*contd.*			
102C	STEEL BAR AND ROD, the following kinds—	....	*Ad valorem*	10 per cent.
	(*a*) shapes specially designed for the reinforcement of concrete, if the smallest dimension is under ½ inch;			
	(*b*) all shapes and sizes, if—			
	(*i*) of alloy, crucible, shear, blister or tub steel, or			
	(*ii*) galvanized or coated with other metals, or			
	(*iii*) planished or polished including bright steel shafting;			
	(*c*) other qualities, if of any of the following shapes and sizes—			
	(*i*) rounds under ½ inch diameter			
	(*ii*) squares under ½ inch side.			
	(*iii*) flats, if under 1 inch wide and not over ⅛ inch thick,			
	(*iv*) flats not under 8 inches wide and not over ¼ inch thick,			
	(*v*) ovals, if the dimension of the major axis is not less than twice that of the minor axis,			
	(*vi*) all other shapes, any size.			
	Tariff values.—			
	Bar and rod—			
	Galvanized or coated with other metals, all shapes and sizes.	ton.	200 0 0	10 per cent.
	Planished or polished, including bright steel shafting, all shapes and sizes.	„	210 0 0	10 „
102D	STEEL, BAR AND ROD, not otherwise specified (*see* Serial No. 102c)—			Rs. a. p.
	(*i*) of British manufacture	ton.	....	26 0 0
	(*ii*) not of British manufacture	„	....	37 0 0
102E	STEEL (other than bars), alloys, crucible, shear, blister and tub.	....	*Ad valorem*	10 per cent.
102F	STEEL (other than bars) made for springs and cutting tools by any process.	....	„	10 „
102G	STEEL ingots, blooms and billets, and slabs of a thickness of 1½ inches or more.	....	„	10 „

Schedule II.—(Import Tariff)—*continued.*

Serial No	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	METALS, IRON AND STEEL—*contd.*			
102 H	STEEL STRUCTURES, fabricated partially or wholly, not otherwise specified, if made mainly or wholly of steel bars, sections, plates or sheets, for the construction of buildings, bridges, tanks, well curbs, trestles, towers and similar structures or for parts thereof, but not including builders' hardware (*see* Serial No. 84) or any of the articles specified in Serial Nos. 76, 96, 99 or 159—			
	(*i*) of British manufacture	ton	....	Rs. 21 or 17 per cent. *ad valorem* whichever is higher.
	(*ii*) not of British manufacture	,,	....	Rs. 21 or 17 per cent. *ad valorem* whichever is higher, *plus* Rs. 15 per ton.
102 I	STEEL, tinplates and tinned sheets, including tin taggers and cuttings of such plates, sheets or taggers.	,,	....	Rs. 48.
103 A	IRON OR STEEL anchors and cables	....	*Ad valorem*	10 per cent.
103 B	IRON OR STEEL bolts and nuts, including hookbolts and nuts for roofing.	cwt.	....	Rs. 2.
103 C	IRON OR STEEL EXPANDED METAL	....	*Ad valorem*	10 per cent.
103 D	IRON OR STEEL HOOPS AND STRIPS	....	,,	10 ,,
*103 F	IRON OR STEEL NAILS, rivets and washers, all sorts	....	,,	10 ,,
	Tariff values.—			
	Nails, rivets and washers—			
	Nails, wire, including French	cwt.	9 0 0	10 ,,
	Nails, rose, deck, and flat-headed	,,	18 0 0	10 ,,
	,, bullock and horse-shoe	,,	42 0 0	10 ,,
	Panel pins, 16 gauge and smaller	,,	13 0 0	10 ,,
	Rivets, boilermakers' or structural, if black	,,	10 0 0	10 ,,
	Washers, black, structural	,,	11 0 0	10 ,,
103 G	IRON OR STEEL PIPES and tubes and fittings therefor, if riveted or otherwise built up of plates or sheets—			
	(*a*) galvanized	ton	....	Rs. 33 or 17 per cent. *ad valorem* whichever is higher.

* There is no entry bearing Serial No. 103*e*.

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	METALS, IRON AND STEEL—*contd.*			
	IRON OR STEEL PIPES and tubes and fittings therefor, if riveted or otherwise built up of plates or sheets—*contd.*			
	(*b*) not galvanized—			
	(*i*) not under $\frac{1}{8}$ inch thick—			
	of British manufacture	ton	....	Rs. 21 or 17 per cent. *ad valorem* whichever is higher.
	not of British manufacture ..	,,	....	Rs. 21 or 17 per cent. *ad valorem* whichever is higher, *plus* Rs. 15 per ton.
	(*ii*) under $\frac{1}{8}$ inch thick—			
	of British manufacture	,,	....	Rs. 39 or 17 per cent. *ad valorem* whichever is higher.
	not of British manufacture ..	,,	....	Rs. 39 or 17 per cent. *ad valorem* whichever is higher, *plus* Rs. 26 per ton.
103 H	IRON OR STEEL PIPES AND TUBES; also fittings therefor, that is to say, bends, boots, elbows, tees, sockets, flanges, plugs, valves, cocks and the like, excluding pipes, tubes and fittings therefor otherwise specified (*see* Serial No. 103*g*).	....	*Ad valorem*	10 per cent.
103 I	IRON OR STEEL PLATES OR SHEETS (including cuttings, discs and circles) not under $\frac{1}{8}$ inch thick and not of cast iron—			
	(*a*) fabricated, all qualities—			
	(*i*) of British manufacture	ton	....	Rs. 21 or 17 per cent. *ad valorem* whichever is higher.
	(*ii*) not of British manufacture ..	,,	....	Rs. 21 or 17 per cent. *ad valorem*, whichever is higher, *plus* Rs. 15 per ton.
	(*b*) not fabricated, chequered and ship, tank, bridge and common qualities—			
	(*i*) of British manufacture	,,	....	Rs. 20.
	(*ii*) not of British manufacture ..	,,	....	Rs. 36.

Schedule II.—(Import Tariff)—continued.

Names of Articles.	Per	Tariff Valuation.	Duty.
III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
METALS, IRON AND STEEL—*contd.*			
IRON OR STEEL PLATES AND SHEETS (including cuttings, discs and circles) not under ⅛ inch thick, not otherwise specified (*see* Serial Nos. 102*h*, 102*i*, 103*g* and 103*i*), whether fabricated or not.	....	*Ad valorem*	10 per cent.
Tariff values.—			
Plates and sheets (including cuttings, discs and circles) not under ⅛ inch thick—			
Boiler fire-box and special qualities, not fabricated.	ton	240 0 0	10 ,,
Galvanized, plain, not fabricated ..	,,	200 0 0	10 ,,
IRON OR STEEL SHEETS (including cuttings, discs and circles) under ⅛ inch thick, whether fabricated or not, if coated with metals other than tin or zinc.	....	*Ad valorem*	10 ,,
IRON OR STEEL SHEETS (including cuttings, discs and circles) under ⅛ inch thick—			
(*a*) fabricated—			
(*i*) galvanized	ton	....	Rs. 33 or 17 per cent. *ad valorem* whichever is higher.
(*ii*) all other sorts not otherwise specified (*see* Serial No. 103*k*)—			
of British manufacture.. ..	,,	....	Rs. 39 or 17 per cent. *ad valorem*, whichever is higher.
not of British manufacture ..	,,	....	Rs. 39 or 17 per cent. *ad valorem* whichever is higher, *plus* Rs. 26 per ton.
(*b*) not fabricated—			
(*i*) galvanized	,,	....	Rs. 30.
(*ii*) all other sorts not otherwise specified (*see* Serial Nos. 102*i* and 103*k*)—			
of British manufacture ..	,,	....	Rs. 35
not of British manufacture ..	,,	....	Rs. 59

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
			Rs. a. p.	
	—Articles wholly or mainly manufactured—*contd.*			
	[illegible] LS, IRON AND STEEL—*contd.*			
103 M	IRON [illegible] EEL RAILWAY TRACK MATERIAL—			
	A. [illegible]s (including tramway rails the heads of [illegible]ich are not grooved)—			
	(*a*) (*i*) 30 lbs. per yard and over ..	ton	....	Rs. 13.
	(*ii*) fish-plates therefor	,,	....	Rs. 6 or 10 per cent. *ad valorem*, whichever is higher.
	(*iii*) spikes and tie-bars therefor—			
	of British manufacture ..	,,	....	Rs. 26.
	not of British manufacture.	,,	....	Rs. 37.
	(*b*) under 30 lbs. per yard, and fish-plates, spikes and tie-bars therefor—			
	if of British manufacture .	,,	....	Rs. 26.
	if not of British manufacture	,,	....	Rs. 37.
	B. [illegible]hes and crossings and the like mate[illegible]ls not made of alloy steel, including [illegible]itches and crossings and the like ma[illegible]ials for tramway rails the heads of [illegible]ich are not grooved—			
	(*i*) for rails 30 lbs. per yard and over.	,,	....	Rs. 14 or 17 per cent. *ad valorem*, whichever is higher.
	(*ii*) for rails under 30 lbs. per yard—			
	of British manufacture.. ..	,,	....	Rs. 29 or 17 per cent. *ad valorem*, whichever is higher.
	not of British manufacture ..	,,	....	Rs. 29 or 17 per cent. *ad valorem*, whichever is higher, *plus* Rs. 12 per ton.
	C. S[illegible]ers, other than cast iron, and keys and [illegible]tance pieces and the like for use with [illegible]h sleepers.	,,	....	Rs. 10 or 10 per cent. *ad valorem*, whichever is higher.

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*concld.*		Rs. a. p.	
	METALS, IRON AND STEEL—*concld.*			
103 N	IRON OR STEEL RAILWAY track material not otherwise specified (*see* Serial Nos. 103*m* and 117) including bearing plates, cast iron sleepers and fastenings therefor, and lever-boxes.	....	*Ad valorem*	10 per cent.
*103 P	IRON OR STEEL TRAMWAY track material, not otherwise specified (*see* Serial No. 103*m*), including rails, fish-plates, tie-bars, switches, crossings and the like materials of shapes and sizes specially adapted for tramway tracks.	....	,,	10 ,,
103 Q	IRON OR STEEL wire including fencing-wire and wire-rope, but excluding wire-netting.	....	,,	10 ,,
*103 S	IRON OR STEEL (other than bar or rod) specially designed for the reinforcement of concrete.	....	,,	10 ,,
103 T	IRON OR STEEL, the original material (but not including machinery) of any ship or other vessel intended for inland or harbour navigation which has been assembled abroad, taken to pieces and shipped for reassembly in India :—	ton	....	Rs. 23 or 10 per cent, *ad valorem*, whichever is higher.
	Provided that articles dutiable under this item shall not be deemed to be dutiable under any other item.			
104	ALL SORTS OF IRON AND STEEL and manufactures thereof, not otherwise specified.	....	*Ad valorem*	15 per cent.
	Tariff values—			
	Iron and Steel cans or drums—			
	When imported containing kerosene and motor spirit, namely :—			
	Cans, tinned, of four gallons capacity ..	can	0 8 0	15 ,,
	Cans or drums, not tinned, of two gallons capacity—			
	(*a*) with faucet caps	can or drum	1 8 0	15 ,,
	(*b*) ordinary	,,	0 6 0	15 ,,
	Drums of four gallons capacity—			
	(*a*) with faucet caps	drum	2 3 0	15 ,,
	(*b*) ordinary	,,	1 8 0	15 ,,
	METALS, OTHER THAN IRON AND STEEL			
105	CURRENT NICKEL, bronze, and copper coin of the Government of India.	....	....	Free.
106	GOLD AND SILVER bullion and coin and gold and silver sheets and plates which have undergone no process of manufactures, subsequent to rolling.	....	....	,,
107	GOLD PLATE, gold thread and wire, gold leaf and gold manufactures, all sorts not otherwise specified	....	*Ad valorem*	30 per cent.
108	SILVER PLATE, silver thread and wire, silver leaf and silver man[illegible] all sorts not otherwise specified.	....	,,	30 ,,

* The [illegible] rial Nos. 103*o* and 103*r*.

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	METALS, OTHER THAN IRON AND STEEL. —*contd.*			
109	TIN, block	ton	....	Rs. 250.
110	ZINC, unwrought, including cakes, ingots, tiles (other than boiler tiles), hard or soft slabs and plates, dust, dross and ashes; and broken zinc.	....	....	Free.
111	ALL SORTS OF METALS OTHER THAN IRON AND STEEL and manufactures thereof, not otherwise specified.	....	*Ad valorem*	15 per cent,
	Tariff values—			
	Aluminium circles	lb.	0 12 0	15 ,,
	,, sheets, plain	,,	0 11 0	15 ,,
	Brass, patent or yellow metal, sheets and sheathing, weighing 1 lb. or above per square foot, and braziers, and plates.	cwt.	46 0 0	15 ,,
	Brass, patent or yellow metal (including gun metal) ingots.	,,	33 0 0	15 ,,
	Brass, patent or yellow metal (including gun metal old.)	,,	28 0 0	15 ,,
	Copper, braziers, sheets, plates and sheathing.	,,	51 0 0	15 ,,
	,, old	,,	34 0 0	15 ,,
	,, pigs, tiles, ingots, cakes, bricks and slabs.	,,	50 0 0	15 ,,
	,, China, white, copperware	lb.	3 0 0	15 ,,
	,, foil or dankpana, plain, white, 10 to 11 in. ×4 to 5 in.	hundred leaves.	1 10 0	15 ,,
	,, foil or dankpana, plain, coloured, 10 to 11 in. ×4 to 5 in.	,,	1 10 0	15 ,,
	Lead, pig	cwt.	20 0 0	15 ,,
	Quicksilver	lb.	4 0 0	15 ,,
	PAPER, PASTEBOARD AND STATIONERY.			
112	Paper and articles made of paper and papier mache, pasteboard, millboard, and cardboard, all sorts, and stationery, including drawing and copy books, labels, advertising circulars, sheet or card almanacs and calendars, Christmas, Easter, and other cards, including cards in booklet form, including also waste paper and old newspapers for packing, but excluding trade catalogues and advertising circulars imported by packet, book, or parcel post and postage stamps whether used or unused and paper money and paper and stationery otherwise specified.	....	*Ad valorem*	15 ,,
	Tariff values.—			
	Old newspapers in bales and bags ..	cwt.	5 0 0	15 ,,
	Printing paper (excluding chrome, marble, flint, poster and stereo) in which the mechanical wood pulp amounts to not less than 65 per cent. of the fibre content, glazed or unglazed, white or grey.	lb.	0 2 0	15 ,,

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	PAPER, PASTEBOARD AND STATIONERY.—*contd.*			
	Tariff values.—contd.			
	Packing and wrapping paper—			
	Machine-glazed pressings	lb.	0 2 6	15 per cent.
	Manilla, machine-glazed or unglazed and sulphite envelope.	,,	0 2 9	15 ,,
	Kraft and imitation kraft	,,	0 2 9	15 ,,
	Straw boards	cwt.	6 8 0	15 ,,
113	Printing paper (excluding chrome, marble, flint, poster and stereo), all sorts, which contain no mechanical wood pulp or in which the mechanical wood pulp amounts to less than 65 per cent. of the fibre content.	lb.	....	One anna.
114	WRITING PAPER—			
	(*a*) Ruled or printed forms (including letter paper with printed headings) and account and manuscript books and the binding thereof.	,,	....	One anna or 15 per cent. *ad valorem*, whiche v er is higher.
	(*b*) All other sorts	,,	....	One anna.
115	TRADE CATALOGUES and advertising circulars imported by packet, book, or parcel post.	....	....	Free.
116	POSTAGE STAMPS, whether used or unused ..	....	....	,,
116 A	PAPER MONEY	....	....	,,
	RAILWAY PLANT AND ROLLING-STOCK.			
117	Railway materials for permanent-way and rolling-stock, namely, sleepers, other than iron and steel, and fastenings therefor; bearing plates, fish bolts and nuts, chairs, interlocking apparatus, brake-gear, shunting skids, couplings and springs, signals, turntables, weighbridges, carriages, wagons, traversers, rail removers, scooters, trollies, trucks and component parts thereof; switches, crossings and the like materials made of alloy steel; also cranes, water cranes and water-tank when imported by or under the orders of a railway admi·istration. Provided that for the purpose of this entry 'railway' means a line of railway subject to the provisions of the Indian Railways Act, 1890, and includes a railway constructed in a State in India and also such tramways as the Governor-General in Council may, by notification in the *Gazette of India*, specifically include therein: Provided also that articles of machinery as defined in Serial No. 96 or No. 99 shall not be deemed to be included hereunder.	....	*Ad valorem*	10 per cent.
118	Component Parts of Railway Materials as defined in Serial No. 117, namely, such parts only as are essential for the working of railways and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose:	....	,,	10 ,,

* Under the Government of India, Finance Department (Central Revenues) Notification No. 20 dated the 2nd April 1927, cranes, water-cranes and water-tanks when imported by the administration not being a railway company, of any railway as defined in the first proviso to this item, are liable to duty at 10 per cent. *ad valorem*.

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
			Rs. a. p.	
	III.—Articles wholly or mainly manufactured—*contd.*			
	METALS, IRON AND STEEL—*contd.*			
103 M	IRON OR STEEL RAILWAY TRACK MATERIAL—			
	A. Rails (including tramway rails the heads of which are not grooved)—			
	(*a*) (*i*) 30 lbs. per yard and over ..	ton	....	Rs. 13.
	(*ii*) fish-plates therefor	,,	....	Rs. 6 or 10 per cent. *ad valorem*, whichever is higher.
	(*iii*) spikes and tie-bars therefor—			
	of British manufacture ..	,,	....	Rs. 26.
	not of British manufacture.	,,	....	Rs. 37.
	(*b*) under 30 lbs. per yard, and fish-plates, spikes and tie-bars therefor—			
	if of British manufacture .	,,	....	Rs. 26.
	if not of British manufacture	,,	....	Rs. 37.
	B. Switches and crossings and the like materials not made of alloy steel, including switches and crossings and the like materials for tramway rails the heads of which are not grooved—			
	(*i*) for rails 30 lbs. per yard and over.	,,	....	Rs. 14 or 17 per cent. *ad valorem*, whichever is higher.
	(*ii*) for rails under 30 lbs. per yard—			
	of British manufacture.. ..	,,	....	Rs. 29 or 17 per cent. *ad valorem*, whichever is higher.
	not of British manufacture ..	,,	....	Rs. 29 or 17 per cent. *ad valorem*, whichever is higher, *plus* Rs. 12 per ton.
	C. Sleepers, other than cast iron, and keys and distance pieces and the like for use with such sleepers.	,,	....	Rs. 10 or 10 per cent. *ad valorem*, whichever is higher.

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*concld.*		Rs. a. p.	
	METALS, IRON AND STEEL—*concld.*			
103 N	IRON OR STEEL RAILWAY track material not otherwise specified (*see* Serial Nos. 103*m* and 117) including bearing plates, cast iron sleepers and fastenings therefor, and lever-boxes.	....	*Ad valorem*	10 per cent.
*103 P	IRON OR STEEL TRAMWAY track material, not otherwise specified (*see* Serial No. 103*m*), including rails, fish-plates, tie-bars, switches, crossings and the like materials of shapes and sizes specially adapted for tramway tracks.	....	,,	10 ,,
103 Q	IRON OR STEEL wire including fencing-wire and wire-rope, but excluding wire-netting.	....	,,	10 ,,
*103 S	IRON OR STEEL (other than bar or rod) specially designed for the reinforcement of concrete.	....	,,	10 ,,
103 T	IRON OR STEEL, the original material (but not including machinery) of any ship or other vessel intended for inland or harbour navigation which has been assembled abroad, taken to pieces and shipped for reassembly in India :—	ton	....	Rs. 23 or 10 per cent, *ad valorem.* whichever is higher.
	Provided that articles dutiable under this item shall not be deemed to be dutiable under any other item.			
104	ALL SORTS OF IRON AND STEEL and manufactures thereof, not otherwise specified.	....	*Ad valorem*	15 per cent.
	Tariff values—			
	Iron and Steel cans or drums—			
	When imported containing kerosene and motor spirit, namely :—			
	Cans, tinned, of four gallons capacity ..	can	0 8 0	15 ,,
	Cans or drums, not tinned, of two gallons capacity—			
	(*a*) with faucet caps	can or drum	1 8 0	15 ,,
	(*b*) ordinary	,,	0 6 0	15 ,,
	Drums of four gallons capacity—			
	(*a*) with faucet caps	drum	2 3 0	15 ,,
	(*b*) ordinary	,,	1 8 0	15 ,,
	METALS, OTHER THAN IRON AND STEEL			
105	CURRENT NICKEL, bronze, and copper coin of the Government of India.	....	....	Free.
106	GOLD AND SILVER bullion and coin and gold and silver sheets and plates which have undergone no process of manufactures, subsequent to rolling.	....	....	,,
107	GOLD PLATE, gold thread and wire, gold leaf and gold manufactures, all sorts not otherwise specified	....	*Ad valorem*	30 per cent.
108	SILVER PLATE, silver thread and wire, silver leaf and silver manufactures, all sorts not otherwise specified.	....	,,	30 ,,

* There are no entries bearing Serial Nos. 103*o* and 103*r*.

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	METALS, OTHER THAN IRON AND STEEL.—*contd.*			
109	TIN, block	ton	....	Rs. 250.
110	ZINC, unwrought, including cakes, ingots, tiles (other than boiler tiles), hard or soft slabs and plates, dust, dross and ashes; and broken zinc.	....	....	Free.
111	ALL SORTS OF METALS OTHER THAN IRON AND STEEL and manufactures thereof, not otherwise specified.	....	*Ad valorem*	15 per cent,
	Tariff values—			
	Aluminium circles	lb.	0 12 0	15 ,,
	,, sheets, plain	,,	0 11 0	15 ,,
	Brass, patent or yellow metal, sheets and sheathing, weighing 1 lb. or above per square foot, and braziers, and plates.	cwt.	46 0 0	15 ,,
	Brass, patent or yellow metal (including gun metal) ingots.	,,	33 0 0	15 ,,
	Brass, patent or yellow metal (including gun metal old.)	,,	28 0 0	15 ,,
	Copper, braziers, sheets, plates and sheathing.	,,	51 0 0	15 ,,
	,, old	,,	34 0 0	15 ,,
	,, pigs, tiles, ingots, cakes, bricks and slabs.	,,	50 0 0	15 ,,
	,, China, white, copperware	lb.	3 0 0	15 ,,
	,, foil or dankpana, plain, white, 10 to 11 in. Æ4 to 5 in.	hundred leaves.	1 10 0	15 ,,
	,, foil or dankpana, plain, coloured, 10 to 11 in. × 4 to 5 in.	,,	1 10 0	15 ,,
	Lead, pig	cwt.	20 0 0	15 ,,
	Quicksilver	lb.	4 0 0	15 ,,
	PAPER, PASTEBOARD AND STATIONERY.			
112	Paper and articles made of paper and papier mache, pasteboard, millboard, and cardboard, all sorts, and stationery, including drawing and copy books, labels, advertising circulars, sheet or card almanacs and calendars, Christmas, Easter, and other cards, including cards in booklet form, including also waste paper and old newspapers for packing, but excluding trade catalogues and advertising circulars imported by packet, book, or parcel post and postage stamps whether used or unused and paper money and paper and stationery otherwise specified.	....	*Ad valorem*	15 ,,
	Tariff values.—			
	Old newspapers in bales and bags ..	cwt.	5 0 0	15 ,,
	Printing paper (excluding chrome, marble, flint, poster and stereo) in which the mechanical wood pulp amounts to not less than 65 per cent. of the fibre content, glazed or unglazed, white or grey.	lb.	0 2 0	15 ,,

Schedule II.—(Import Tariff)—*continued.*

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	PAPER, PASTEBOARD AND STATIONERY.—*contd.*			
	Tariff values.—contd.			
	Packing and wrapping paper—			
	Machine-glazed pressings	lb.	0 2 6	15 per cent.
	Manilla, machine-glazed or unglazed and sulphite envelope.	,,	0 2 9	15 ,,
	Kraft and imitation kraft	,,	0 2 9	15 ,,
	Straw boards	cwt.	6 8 0	15 ,,
113	Printing paper (excluding chrome, marble, flint, poster and stereo), all sorts, which contain no mechanical wood pulp or in which the mechanical wood pulp amounts to less than 65 per cent. of the fibre content.	lb.	....	One anna.
114	WRITING PAPER—			
	(*a*) Ruled or printed forms (including letter paper with printed headings) and account and manuscript books and the binding thereof.	,,	....	One anna or 15 per cent. *ad valorem*, whiche v er is higher.
	(*b*) All other sorts	,,	....	One anna.
115	TRADE CATALOGUES and advertising circulars imported by packet, book, or parcel post.	....	....	Free.
116	POSTAGE STAMPS, whether used or unused ..	....	....	,,
116 A	PAPER MONEY	....	....	,,
	RAILWAY PLANT AND ROLLING-STOCK.			
117	Railway materials for permanent-way and rolling-stock, namely, sleepers, other than iron and steel, and fastenings therefor; bearing plates, fish bolts and nuts, chairs, interlocking apparatus, brake-gear, shunting skids, couplings and springs, signals, turntables, weighbridges, carriages, wagons, traversers, rail removers, scooters, trollies, trucks and component parts thereof; switches, crossings and the like materials made of alloy steel; also cranes, water cranes and water-tank when imported by or under the orders of a railway admi· istration. Provided that for the purpose of this entry 'railway' means a line of railway subject to the provisions of the Indian Railways Act, 1890, and includes a railway constructed in a State in India and also such tramways as the Governor-General in Council may, by notification in the *Gazette of India*, specifically include therein: Provided also that articles of machinery as defined in Serial No. 96 or No. 99 shall not be deemed to be included hereunder.	....	*Ad valorem*	10 per cent.
118	Component Parts of Railway Materials as defined in Serial No. 117, namely, such parts only as are essential for the working of railways and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose:	....	,,	10 ,,

* Under the Government of India, Finance Department (Central Revenues) Notification No. 20 dated the 2nd April 1927, cranes, water-cranes and water-tanks when imported by the administration not being a railway company, of any railway as defined in the first proviso to this item, are liable to duty at 10 per cent. *ad valorem*.

Schedule II—(Import Tariff)—*continued.*

Serial No	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	RAILWAY PLANT AND ROLLING-STOCK —*contd.*			
	Provided that articles which do not satisfy this condition shall also be deemed to be component parts of the railway material to which they belong, if they are essential to its operation and are imported with it in such quantities as may appear to the Collector of Customs to be reasonable.			
	YARNS AND TEXTILE FABRICS.			
119	ARTIFICIAL SILK YARN AND THREAD	....	*Ad valorem*	7½ per cent.
120	COTTON PIECE-GOODS	....	"	11 "
121	COTTON TWIST AND YARN, and cotton sewing or darning thread.	....	"	5 " or 1½ anna per cent, whichever is higher.
122	SECOND-HAND or used gunny bag or cloth made of jute.	....	....	Free.
122 A	YARN (excluding cotton yarn) such as is ordinarily used for the manufacture of belting for machinery	....	*Ad valorem*	15 per cent.
123	YARNS AND TEXTILES FABRICS, that is to say :—	....		
	Cotton thread other than sewing or darning thread, and all other manufactured cotton goods not other wise specified.		,,	15 ,,
	FLAX, twist and yarn, and manufactures of flax			
	Haberdashery and millinery excluding articles made of silk and silk mixtures.			
	Hemp manufactures.			
	Hosiery, excluding articles made of silk.			
	Jute, twist and yarn, and jute manufactures, excluding second-hand or used gunny bags or cloth.			
	Silk yarn, noils and warps and silk thread.			
	Woollen yarn, knitting wool and other manufactures of wool, including felt.			
	All other sorts of yarns and textile Fabrics, not otherwise specified.			
124	SILK GOODS osed or required for medical purpose namely, silk ligatures. elastic silk hosiery, elbow piess, thigh pieces, knee caps, egging, socks, anklets, stockings, suspensory bandages, silk abdominal belts, silkweb, catheter tubes and oiled silk.	....	*Ad valorem*	15 ,,
	SILK mixtures, that is to say	....	,,	20 ,,
125	(*a*) fabrics composed in part of some other textile than silk and in which any portion either of the warp or of the weft but not of both silk;			
	(*b*) fabrics not being silk on which silk is superimposed such as embroidered fabrics;			
	(*c*) articles made from such fabrics and not otherwise specified (*see* Serial No. 124).			
	N.B.—For tariff values under this item *see* those marked with an asterisk (*) under Serial No. 126 below.			

Schedule II.—(Import Tariff)—*continued*.

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd*.		Rs. a. p.	
	YARNS AND TEXTILE FABRICS—*contd*.			
126	SILK PIECE-GOODS and other manufactures of silk, not otherwise specified (*see* Serial Nos. 124 and 125).	....	*Ad valorem*	30 per cent.
	Tariff values.— Silk. piece-goods (white or coloured, plain or figured and all widths) from Japan and China (including Hongkong)—			
	Japan— Paj, all kinds, including Habutai, Thama, Junken and Nankin, and including striped, printed, woven so-called (*i.e.*, swivel weave-work of Khakho embroidered), embossed and pineapples but excluding all kinds of Shioji or Shin Paj.	lb.	19 0 0	
	Satins, Taffetas and Kohakus, all kinds, including striped, printed, woven so-called (*i.e.*, swivel weave-work or Khakho embroidered), and embossed.	,,	21 0 0	
	Twill, all kinds	,,	21 0 0	
	Jarina (gold embroidered)	,,	23 0 0	
	Fugi and Boseki, all kinds	,,	9 12 0	
	Fancies, printed and woven so-called (*i.e.*, swivel weave-work orKhakho embroidered), including Georgettes, crepes, ninons, gauzes, and all kinds of Shioji or Shin Paj.	,,	23 8 0	
	Embroideries and embroidered piece-goods, excluding Burmese scarves.	,,	41 8 0	
	Shawls, dhuties, handkerchiefs, hosiery, mufflers and scarves, excluding Burmese scarves.	,,	32 8 0	
	Dupettas and China Silk patkas	,,	16 0 0	
	Burmese scarves —(*a*) Paj or Habutai ..	,,	33 0 0	
	(*b*) Other kinds	,,	40 0 0	
	*Cotton and silk mixed satins, embroidered ..	,,	14 0 0	
	*Cotton and silk mixed satins, other kinds ..	,,	8 8 0	
	*Cotton and silk mixed hosiery	,,	28 0 0	
	*Cotton and silk mixed Fugi and Boseki, all kinds.	,,	7 8 0	
	Silk Fents	,,	7 12 0	
	China (*including Hongkong but excluding Canton*)—			
	Honans, all kinds, and patkas	,,	8 0 0	
	Shantungs and Tussores, all kinds, including patkas.	,,	6 8 0	
	Corded, all kinds, excepting white cords ..	,,	5 0 0	
	White cords, all kinds	,,	9 12 0	
	Crepe, gauze and paj, all kinds	,,	18 8 0	
	Satins and fancies, all kinds, including loongies and stripes, Taffetas, and Pagris, all kinds.	,,	17 0 0	
	Fugi and Boseki, all kinds	,,	9 8 0	
	N. B.—The tariff values marked with an asterisk (*) are also applicable to silk mixtures under serial No .125 above.			

Schedule II.—(Import Tariff)—*contd.*

Serial No.	Names of Articles.	Per	Tariff valuation.	Duty.
	II,—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	MISCELLANEOUS.			
	...ES, aeroplane parts, aeroplane engines, ...ne engine parts and rubber tyres and ...sed exclusively for aeroplanes.	....	*Ad valorem*	2½ per cent.
161	... following works of:—(1) statuary and ...s intended to be put up for the public ... in a public place, and (2) memorials of a ... character intended to be put up in a ... place, including the materials used, or ...ised in their construction, whether worked ...	....	....	Free.
162				
162A				
163	...rks of, excluding those specified in Serial ...28.	....	*Ad valorem*	15 per cent.
	...PRINTED, including covers for printed ..., maps, charts, and plans, proofs, music, ...iscripts and illustrations specially made for ...ng in books.	....	....	Free.
164	...s and brooms	....	*Ad valorem*	15 per cent.
165	...g and Engineering Materials, including ...alt, bricks, cement (excluding Portland ...ent other than white Portland cement), chalk ... lime, clay, pipes of earthen-ware, tiles, ...ricks not being component parts of any ...le included in Serial No. 96 or No. 117 and ...other sorts of building and engineering ...erials not otherwise specified, including ...men and other insulating materials.	....	,,	15 ,,
166	...LES	....	,,	15 ,,
	... CLAY	....	....	Free.
	...IATOGRAPH FILMS	....	*Ad valorem*	15 per cent.
	...*riff values.*—			
	...Exposed standard positive films, new or used—	Foot	0 4 6	15 ,,
	...age and rope and twine of vegetable fibre not ...herwise specified.	....	*Ad valorem*	15 ,,
	...*riff value.*—			
167	...Coir yarn	cwt.	13 0 0	15 ,,
168	...works specially prepared as danger or distress ...ghts for the use of ships.	....	*Ad valorem*	15 ,,
169	...EWORKS not otherwise specified (*see* Serial ...o. 137).	....	,,	30 ,,
169A	...NITURE tackle and apparel, not otherwise ...escribed, for steam-sailing, rowing and other ...essels.	....	,,	15 ,,
170	...RY, manufactured	....	,,	30 ,,
171	...WELLERY AND JEWELS	....	,,	30 ,,
	...IGHT SHIPS	....	....	Free.
	...ATCHES—			Rs. a. p.
	(1) In boxes containing on the average not more than 100 matches.	gross of boxes.	....	1 8 0
	(2) In boxes containing on the average more than 100 matches.	For every 25 matches or fraction thereof in each box, per gross of boxes.	....	0 6 0

Schedule II—(Import Tariff)—*contd.*

Serial No.	Names of Articles.	Per	Tariff valuation	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	Rs. a. p.
	MISCELLAENOUS—*contd.*			
143	Undipped splints such as are ordinarily used for match making.	lb.	....	0 4 6
144	Veneers such as are ordinarily used for making match boxes, including boxes and parts of boxes made of such veneers.	„	....	0 6 0
145	Mats and Matting	....	*Ad valorem*	15 per cent.
146	Oilcakes	....	„	15 „
147	Oilcloth and Floor cloth	....	„	15 „
148	Packing—Engine and Boiler—all sorts, excluding packing forming a component part of any article included in Serial Nos. 96 and 117.	....	„	15 „
149	Perfumery, not otherwise specified	....	„	15 „
	Tariff values.—			
	Gowla, husked and unhusked	cwt.	70 0 0	15 „
	Kapurkachri (zedoary)	„	27 0 0	15 „
	Patch leaves (patchouli)	„	26 0 0	15 „
	Rose-flowers, dried	„	23 0 0	15 „
150	Pitch, tar and dammer	....	*Ad valorem*	15 „
	Tariff values.—			
	Coal pitch	cwt.	5 0 0	15 „
	Stockholm pitch	„	16 8 0	15 „
	„ tar	„	19 0 0	15 „
	Dammer Batu	„	7 8 0	15 „
151	Polishes and compositions..	....	*Ad valorem*	15 „
152	Portland Cement excluding white Portland cement.	ton.	....	9 0 0
153	Printer's ink	....	*Ad valorem*	5 per cent.
154	The following printing material, namely, type, leads, brass rules, wooden and metal quoins, shooting sticks and galleys and metal furniture.	....	„	$2\frac{1}{2}$ „
155	Prints, Engravings and Pictures, (including photographs and picture post cards), not otherwise specified.	....	„	30 „
156	Racks for the withering of tea leaf	....	„	$2\frac{1}{2}$ „
157	Ropes, cotton	....	....	Free.
158	Rubber Tyres and other manufactures of rubber, not otherwise specified (*see* Serial No. 127).	....	*Ad valorem*	15 per cent.
159	Ships and other vessels for inland and harbour navigation, including steamers, launches, boats and barges imported entire or in sections: Provided that articles of machinery as defined in Serial No. 96 or No. 99 shall, when separately imported, not be deemed to be included hereunder.	....	„	10 „
160	Smokers' requisites, excluding tobacco (Serial Nos. 27 to 30) and matches (Serial No. 142).	....	„	30 „

Schedule II—(Import Tariff)—*contd.*

Serial No.	Names of Articles.	Per	Tariff valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a. p.	
	MISCELLANEOUS—*contd.*			
161	SOAP	....	*Ad valorem*	15 per cent.
	Tariff value.— Soft Soap	cwt.	17 0 0	15 "
162	STARCH and farina	....	....	Free.
162A	STONE prepared as for road metalling	....	....	"
163	STONE AND MARBLE, and articles made of stone and marble but excluding stone prepared as for road metalling.	....	*Ad valorem*	15 per cent.
164	TILET REQUISITES, not otherwise specified ..	....	"	15 "
165	TOYS, games, playing cards and requisites for games and sports, including bird-shot, toy cannons, air guns and air pistols for the time being excluded in any part of British India, from the operation of all the prohibitions and directions contained in the Indian Arms Act, 1878; and bows and arrows.	....	"	30 "
	Tariff value.— Bird-shot	cwt.	36 0 0	30 "
166	All other articles wholly or mainly manufactured, not otherwise specified.	....	*Ad valorem*	15 "
	Tariff values.— Bangles—			
	Celluloid, plain, flat, with and without border and grooved but excluding double border.	dozen pairs.	1 8 0	15 "
	Celluloid (rubber rings excluding coils) ..	"	0 6 0	15 "
	IV.—Miscellaneous and Unclassified.			
167	ANIMALS, living, all sorts	....	....	Free.
168	CORAL	....	*Ad valorem*	15 per cent.
169	FODDER, bran and pollards	....	"	2½ "
169A	INSIGNIA and badges of official British and Foreign Orders.	....	....	Free.
170	Specimens, Models and Wall Diagrams illustrative of natural science, and medal and antique coins.	....	....	"
171	UMBRELLAS, including parasols and sunshades, and fittings therefor.	....	*Ad valorem*	15 per cent.
	Tariff values.— Umbrella ribs other then nickelled, brassed, fluted or metal tipped— Solid Flexus, all sizes—			
	From Japan	Dozen Sets of 8.	1 8 0	15 per cent.
	From other countries	"	2 8 0	15 "
	Solids, 23, 25 and 27 inches	Dozen Sets of 12.	2 5 0	15 "
	Solids, 16, 19 and 21 inches	Dozen Sets of 8.	1 4 0	15 "
172	All other articles not otherwise specified, including articles imported by post.	....	*Ad valorem*	15 "

Schedule III—(Export Tariff).

Serial No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	JUTE, OTHER THAN BIMLIPATAM JUTE.		Rs. a. p.	Rs. a. p.
1	RAW JUTE—			
	(1) Cuttings	Bale of 400 lbs.	....	1 4 0
	(2) All other descriptions	,,	....	4 8 0
2	JUTE MANUFACTURES; when not in actual use as coverings, receptacles or bindings for other goods—			
	(1) Sacking (cloth, bags, twist, yarn, rope and twine).	Ton of 2,240 lbs.	....	20 0 0
	(2) Hessians and all other descriptions of jute manufactures, not otherwise specified.*	,,	....	32 0 0
	HIDES AND SKINS.			
3	RAW HIDES AND SKINS— †	....	*Ad valorem*	5 per cent.
	Tariff values.—			
	If exported from Burma—			
	(1) Arsenicated and air-dried hides—			
	(*a*) Cows (including calf skins) ..	lb.	0 8 0	5 ,,
	(*b*) Buffaloes (including calf skins) ..	,,	0 4 0	5 ,,
	(2) Dry salted hides—			
	(*a*) Cows (including calf skins) ..	,,	0 6 6	5 ,,
	(*b*) Buffaloes (including calf skins) ..	,,	0 3 9	5 ,,
	(3) Wet salted hides—			
	(*a*) Cows (including calf skins) ..	,,	0 5 0	5 ,,
	(*b*) Buffaloes (including calf skins) ..	,,	0 2 9	5 ,,
	(4) Goat and kid skins	Piece	1 0 0	5 ,,
	(5) Sheep skins	,,	0 10 6	5 ,,
	If exported from any place in British India other than Burma—			
	(1) Arsenicated and air-dried hides—			
	(*a*) Cows (Including calf skins) Framed. ..	lb.	0 10 0	5 ,,
	(*a*) Cows (Including calf skins) Unframed ..	,,	0 6 9	5 ,,
	(*b*) Buffaloes (including calf skins) Framed ..	,,	0 8 0	5 ,,
	(*b*) Buffaloes (including calf skins) Unframed ..	,,	0 4 6	5 ,,
	(2) Dry salted hides—			
	(*a*) Cows (including calf skins) ..	,,	0 7 9	5 ,,
	(*b*) Buffaloes (including calf skins) ..	,,	0 4 6	5 ,,
	(3) Wet salted hides—			
	(*a*) Cows (including calf skins) ..	,,	0 5 0	5 ,,
	(*b*) Buffaloes (including calf skins) ..	,,	0 2 9	5 ,,
	(4) Goat and kid skins	Piece	1 10 0	5 ,,
	(5) Sheep skins	,,	1 1 0	5 ,,
	RICE.			
4	RICE, husked or unhusked, including rice flour, but excluding rice bran and rice dust, which are free.	Indian maund of 82 2/7 lbs. avoirdupois weight.	....	Three annas.

* Under Government of India Notification No. 1428, dated 17th November 1923, Jute Rags such as are used for paper-making, are exempt from payment of export duty provided that the Customs Collector is satisfied that they are useless for any purpose to which cloth or rope is ordinarily put.

† Under Government of India, Finance Department (Central Revenues), Notification No. 35, dated the 25th September 1926, hide and skin cuttings and fleshings, such as are used for glue-making, are exempt from payment of export duty.

Trade.

India is pre-eminently an agricultural country, and that fact dominates the course of its trade. The great export staples are the produce of the soil—wheat, seeds, cotton and jute. If we look back on the course of Indian trade over a long period of years we shall note a striking development towards stability. In the days that are past, the outturn of the soil was subjected to periodic shocks from famines arising from the failure of the rains, when the export trade in these staples dwindled to small proportions. But the spread of irrigation has produced a great change, and though no doubt in future heavy losses may be incurred from the weakness of the monsoons, they are never likely to be as catastrophic as in such year as 1896-97 and 1899-1900. Well over thirty per cent. of the culturable area of the Punjab is under irrigation, and huge new works are in progress to utilise the waters of the Sutlej, and of the Indus in Sind. Whilst these great works have been carried out or are in progress to spill on the land the floods of the snowfed rivers of the North, other works of a less imposing character have safeguarded the arid tracts of the South. A chain of storage lakes arrests the rains of the Western Ghats and through canals spreads them over the parched lands of the Deccan. The rivers of the South like the Cauvery are being harnessed to preserve their flood waters for Madras. All over India irrigation works, large and small, are being restlessly pressed forward, and their effect is to give a far greater stability to Indian agriculture.

The destination of these surplus crops is another factor of importance. The great customer for Indian cotton is Japan, and to a lesser extent the Continent of Europe. Continental Europe is also a large buyer of her oilseeds and another produce, and of her hides and skins. Whilst the United Kingdom is the great market for tea and wheat, foreign countries are a very important facts in the Indian export trade; therefore India had a vital interest in the economic recovery of Europe. When the post-war boom collapsed it hit India hard and for a year or two the export trade reeled under the shock. The progress of the Dawes Plan and the measures taken under the League of Nations to assist Austria and Hungary back to industrial health had a special bearing on the prosperity of India; they have been elements of importance in inducing her recovery of prosperity.

But whilst India is pre-eminently an agricultural country, she ranks at the International Labour Office at Geneva as one of the great industrial countries of the world. Her manufacturing industries are few in number and are concentrated in a few areas, but they are of great importance. The largest is the cotton textile industry, which has its home in the town and Island of Bombay, with important subsidiary centres at Ahmedabad, Sholapur and Nagpur. Next in importance is the jute industry. Raw jute is a virtual monopoly of Bengal, and the jute mills are concentrated in and near Calcutta. The metallurgical industry is of more recent growth. The principal centre is Jamshedpur, the seat of the works of the Tata Iron and Steel Company where subsidiary industries have sprung up to utilise the products of the blast furnaces and mills. A very large proportion of the jute manufactures is exported. The cotton textile industry has lost a considerable part of its export trade to Japan, the Far East and East Africa; the mills find their principal outlet in India itself, and even there they are subject to severe competition from Japan and China. The iron and steel industry is for the most part a home industry, through large quantities of Indian pig iron are shipped to the Far East, and in some years to the western ports of North and South America. Therefore, whilst India is still in the main an agricultural country, three-quarters of her population drawing their sustenance from the soil, her manufacturing industries are of large and growing importance, and their prosperity every year affects in an increasing degree the general prosperity of the people.

I.—GENERAL.

India's foreign trade, both exports and imports, showed considerable improvement during 1927-28. The total value of the exports of merchandise advanced by Rs. 20 crores or 6 per cent. to Rs. 3,29 crores, while imports rose by Rs. 19 crores or 8 per cent. to Rs. 2,50 crores. The monsoon of the year was unusually good, except for floods in certain areas and the output of crops was, therefore, generally satisfactory. Exchange was stable and there was a steady demand during the year for the staple articles of Indian produce with the exception of cotton.

The Volume of trade.—The following figures show the values of imports and exports of merchandise on the basis of the declared value

in 1913-14. These statistics are necessarily approximate, but they are sufficiently accurate to afford a fairly reliable measure of the course of trade :—

(In crores of Rupees.)

——	1913–14	1920–21	1921–22	1922–23	1923–24	1924–25	1925–26	1926–27	1927–28
Imports	183	142	124	138	120	137	143	156	181
Exports	244	172	182	214	240	250	246	228	248
TOTAL TRADE IN MERCHANDISE EXCLUDING RE-EXPORTS.	427	314	306	352	360	387	389	384	429

It will be noticed that imports in 1927-28 reached very nearly the pre-war level, thanks to lower prices and the successive good monsoons which have increased the purchasing power of the country. Exports also were actually above the 1913-14 level, though a little below the record of 1924-25.

Conditions in Foreign Countries.—The features of progress above detailed would not naturally have been obtained, if economic conditions in most of the countries with which India has trade dealings had not been stable. The year 1927, saw Great Britain recovering from the depressing effects of her long coal strike. On the Continent, the year witnessed the return of Italy to the gold standard and the virtual stabilisation of the French exchange. The United States of America had another year of prosperity. Conditions in the Far East, however, were unsatisfactory. The failure of an important firm in Japan was followed by a severe financial crisis from which that country has not yet fully recovered. Conditions in China also continued unsettled. Both these countries, therefore, purchased less of Indian goods during the year, but their exports to India showed increases.

Imports and Exports—Imports of cotton piece-goods rose by 185 million yards or 10 per cent. in quantity to 1,973 million yards, while the corresponding gain in value was only of Rs. 12 lakhs, not even 1 per cent. of the total value of Rs. 55 crores. Grey goods advanced from 748 million yards valued at Rs. 19⅗ crores to 875 million yards valued at Rs 21¼ crores, but the increase was offset by a decrease under white goods which fell from 571 million yards valued at Rs. 17½ crores to 556 million yards valued at Rs. 15½ crores. The value of coloured goods remained fairly steady at Rs. 17½ crores, though the quantity imported rose from 447 million yards to 505 million yards. Imports of cotton twist and yarn also increased from 49 million lbs. to 52 million lbs. but the value recorded, *viz.*, Rs. 6¾ crores showed very little improvement as compared with the preceding year. The quantity of sugar imported fell by 11 per cent. from 923,000 tons to 823,000 tons, owing to reduced imports of Continental beet sugar, while, as a result of lower prices, the value fell by 21 per cent. from Rs. 19 crores to Rs. 15 crores. Imports of iron and steel rose by 41 per cent. in quantity from 846,000 tons to 1,197,000 tons and by 28 per cent. in value from Rs. 16¾ crores to nearly Rs. 21½ crores. Machinery and millwork advanced by Rs. 2 crores to Rs. 16 crores, railway plant and rolling stock by Rs. 1½ crores to Rs. 4¾ crores and motor vehicles by Rs. 1 crore to Rs. 5 crores. Imports of hardware were valued at Rs. 5¼ crores as against Rs. 5 crores in the preceding year. Larger arrivals of kerosene oil from Russia and Georgia and of fuel oils from Persia were responsible for an increase of 49 million gallons in the quantity and Rs. 1½ crores in the value of the imports of mineral oils, which amounted to 232 million gallons costing nearly Rs. 10½ crores. Imports of provisions were valued at Rs. 6½ crores as compared with Rs. 5¾ crores in 1926-27. The value of silk and silk manufactures and also of wool and woollens totalled over Rs. 5 and Rs. 5⅓ crores respectively as against Rs. 4½ crores each in the preceding year. Imports of artificial silk (including yarn and manufactures) were valued at Rs. 5½ crores, showing an increase of Rs. 1¼ crores as compared with the preceding year. Imports of cotton, mostly of American and East African origin, continued on a large scale and amounted to 66,000 tons valued at Rs. 6¾ crores as compared with 46,000 tons valued at Rs. 5 crores in 1926-27. The value of the imports of liquors (notwithstanding an increase in quantity) and of paper remained fairly stationary at Rs. 3¼ crores and Rs. 3 crores respectively.

Exports.—On the export side, the total value of raw and manufactured jute exported increased from Rs. 80 crores to Rs. 84 crores. Raw jute rose by 184,000 tons or 26 per cent. in quantity to the record figure of 892,000 tons, while the value improved by Rs. 4 crores or 15 per cent. to Rs. 30⅗ crores. Shipments of gunny bags also increased in number from 449 to 463 millions, but the value realised fell from Rs. 24⅓ crores to Rs. 23½ crores. The value of gunny cloth exported advanced from Rs. 28½ crores to Rs. 30 crores, the quantity rising from 1,503 million yards to 1,553 million yards. Exports of raw and manufactured cotton decreased by Rs. 13 crores or 19 per cent. to Rs. 57 crores, raw cotton accounting for a decrease of Rs. 11 crores. Shipments of rice increased by 6 per cent. in quantity and 2 per cent. in value and amounted to 2,152,000 tons valued at Rs. 33⅗ crores. Exports of wheat rose from 176,000 tons valued

at Rs. 2¾ crores to 300,000 tons valued at Rs. 4½ crores. Food grains, other than these and pulses also showed increases. The tea trade showed a large improvement, shipments increasing in quantity by nearly 12½ million lbs. and in value by Rs. 3½ crores to 362 million lbs. valued at Rs. 32½ crores. The total value of the shipments of oilseeds advanced by Rs. 7½ crores to Rs.26½ crores, the exports of groundnuts being almost double the quantity despatched in the preceding year. The quantity of lac exported decreased by 8 per cent. from 592,000 cwts to 544,000 cwts. but higher prices accounted for an increased return of Rs. 1½ crores or 28 per cent., the total value realised being Rs. 7 crores.

Balance of Trade.—The visible balance of trade in merchandise and treasure for the year 1927-28 was in favour of India to the extent of Rs. 50 crores as compared with Rs. 40 crores in the preceding year and the record figure of Rs. 1,09 crores in 1925-26. The net imports of private treasure further declined from Rs. 39 crores to Rs. 32 crores, of which net imports of gold were valued at Rs. 18,10 lakhs and silver at Rs. 13,85 lakhs. Net imports of currency notes amounted to Rs. 24 lakhs.

II—IMPORTS OF MERCHANDISE.

The following table shows the comparative importance of the principal articles imported into British India :—

IMPORTS.

(In thousands of Rupees.)

—	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	Percentage of proportion to total imports of merchandise in 1927-28.
Cotton and cotton goods .	69,99,28	86,57,25	69,31,26	70,08,13	71,90,16	28.77
Metals and ores	24,87,00	26,55,13	25,40,48	23,86,12	28,41,71	11.37
Machinery and millwork. .	19,13,19	14,74,07	14,88,59	13,63,14	15,93,75	6.38
Sugar	15,23,21	20,66,97	15,58,41	18,89,06	14,90,55	5.97
Oils	8,65,18	9,69,49	10,60,16	9,18,78	11,08,68	4.44
Vehicles	4,34,09	4,41,91	5,74,89	6,39,93	7,69,37	3.08
Provisions and oilman's stores	3,00,93	4,14,91	4,89,59	5,77,64	6,40,60	2.56
Wool raw & manufacturers	2,84,65	4,35,41	4,66,96	4,46,36	5,36,82	2.15
Hardware	4,42,29	4,98,69	5,19,67	5,06,62	5,2433	2.10
Silk raw & manufactured.	4,62,17	4,92,15	3,74,70	4,59,71	5,05,78	2.02
Railway plant and rolling stock	11,22,55	5,83,78	4,96,51	3,25,19	4,76,87	1.91
Instruments, apparatus and appliances ..	3,25,77	3,02,16	3,53,83	4,01,19	4,46,52	1.79
Liquors	3,14,58	3,28,43	3,33,75	3,52,86	3,66,99	1.47
Paper and pasteboard ..	2,71,08	3,03,47	2,81,05	3,08,20	3,00,62	1.20
Tobacco	2,26,18	1,97,88	2,13,35	2,56,11	2,91,32	1.17
Rubber	1,68,42	1,56,06	2,17,72	2,10,96	2,71,67	1.09
Chemicals	2,04,74	2,08,83	2,02,64	2,44,35	2,64,95	1.06
Dyes	2,93,53	2,90,70	1,82,17	2,13,23	2,64,55	1.06
Spices	2,69,36	2,77,73	3,38,45	3,29,15	2,57,85	1.03

Imports—*(continued)*

(In thousands of Rupees).

	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	Percentage of proportion to total imports of merchandise in 1927-28.
Glass and glassware ..	2,45,74	2,60,01	2,59,46	2,52,88	2,48,41	.99
Grain, pulse and flour ..	43,90	10,41	65,77	91,69	2,30,70	.92
Fruits and vegetables ..	1,70,80	1,59,46	1,57,00	1,61,76	2,01,94	.18
Drugs and medicines ..	1,71,90	1,69,64	1,73,11	1,90,02	1,98,28	.79
Salt	1,10,28	1,42,78	1,04,20	1,26,20	1,74,84	.70
Apparel	1,41,25	1,54,39	1,65,61	1,77,87	1,64,45	.66
Soap	1,19,27	1,32,48	1,46,11	1,52,41	1,61,37	.65
Paints and painters' materials	1,30,89	1,26,53	1,29,77	1,44,23	1,54,79	.62
Precious stones and pearls, unset	1,79,81	1,19,55	1,24,03	1,06,99	1,34,45	.54
Building and engineering materials	1,24,77	1,17,37	1,19,08	1,23,91	1,28,80	.52
Haberdashery and millinery	99,02	1,15,57	1,09,99	1,13,50	1,26,55	.51
Stationery	89,06	81,58	88,91	81,96	91,67	.37
Belting for machinery ..	88,12	94,34	82,22	81,29	87,30	.35
Matches	1,45,92	88,89	93,45	65,60	39,37	.16
Wood and timber ..	65,39	58,74	65,65	73,99	81,47	.33
Earthenware & porcelain.	70,91	74,87	76,45	82,82	80,71	.32
Tea chests	64,92	92,79	84,93	62,85	71,80	.29
Arms, ammunition and military stores ..	64,68	91,81	89,70	68,87	70,65	.28
Tea	82,26	62,83	60,30	66,72	69,00	.28
Boots and Shoes	25,45	29,27	40,40	57,13	66,99	.27
Toys and requisites for games	62,88	59,06	54,27	62,11	63,82	.26
Coal and coke	1,76,20	1,32,44	97,65	35,69	62,49	.25

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Total printed goods.
Total dyed goods.
Total woven coloured goods.

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Grey (unbleached.)

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TOTAL

Imports—(*concld*)

(In thousands of Rupees).

	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	Percentage of proportion to total imports of merchandise in 1927-28.
gs ..	55,99	48,27	51,10	52,57	62,38	.25
..	48,94	45,11	49,56	57,02	62,35	.25
..	51,42	64,47	56,88	56,60	61,98	.25
..	13,12	19,09	32,53	35,40	47,05	.19
ials.	20,46	22,09	25,85	34,99	40,28	.16
..	29,57	26,43	25,54	30,53	39,33	.16
..	50,54	42,94	38,51	34,76	38,99	.16
..	23,14	40,02	33,08	41,38	38,50	.15
..	19,87	30,35	34,56	41,85	38,43	.15
and ..	28,31	29,97	32,78	31,49	37,09	.15
canned ..	29,67	31,27	37,72	38,66	36,98	.11
abinet- ..	18,61	15,46	22,00	29,68	30,62	.12
hes and ..	16,51	20,96	25,15	25,66	27,22	.11
..	25,71	27,89	29,40	31,64	26,25	.11
ds ..	21,99	28,64	51,04	40,37	24,11	.10
plate of ..	16,11	11,33	19,61	38,52	17,24	.07
..	9,09,65	10,48,42	10,39,35	12,83,75	15,02,86	6.02
UE OF	2,27,61,23	2,46,62,54	2,26,17,78	2,31,22,08	2,49,84,66	10.0

ufactures (Rs. 65,16 Lakhs). ...lue of the imports of cotton ... 1927-28, showed little variation from the preceding year's figure. In quantities however, there were substantial increases, chiefly on the piece-goods side.

The values of the different classes of imported cotton manufactures during the past five years and the pre-war year 1913-14 are set forth below :—

Imports of cotton manufactures.	1913-14 (pre-war year.)	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
	Rs. (lakhs.)	Rs. (lakhs.)	Rs. (lakhs.).	Rs. (lakhs.)	Rs. (lakhs.)	Rs (lakhs.)
Twist and yarn	4,16	7,94	9,66	7,77	6,62	6,79
Piecegoods—						
Grey (unbleached) ..	25,45	23,06	28,49	21,89	19,62	21,25
White (bleached) ..	14,29	15,44	20,23	15,99	17,53	15,42
Coloured, printed or dyed	17,86	17,69	20,02	15,92	17,22	17,52
Fents of all descriptions	54	65	68	70	65	94
TOTAL PIECEGOODS. .	58,14	56,84	69,42	54,50	55,02	55,13
Hosiery	1,20	94	1,12	1,40	1,47	1,38
Handkerchiefs and shawls	89	23	31	22	19	17
Thread	39	71	73	84	74	77
Other sorts	1,52	82	1,08	94	1,02	92
GRAND TOTAL ..	66,30	67,48	82,32	65,67	65,05	65,16

Cotton Twist and Yarn (Rs. 679 Lakhs)—The imports of twist and yarn amounted to 52·3 million lbs. as against 49·4 million lbs. in 1926-27. There was thus an increase of nearly 3 million lbs. in quantity over 1926-27, the corresponding value increase being Rs. 17 lakhs. The average declared value per lb. of yarn imported during the year was Re. 1-4-9 as against Re. 1-5-6 in 1926-27 and Re. 1-8-0 in 1925-26. Of the total imports, 20½ million lbs. were derived from the United Kingdom, nearly 17 million lbs. from Japan and over 12 million lbs. from China. Imports from these countries in the preceding year were 20 million lbs., 26½ million lbs. and 930,000 lbs. respectively. It will be seen that while the United Kingdom succeeded in maintaining her previous year's record, there was a considerable falling-off in the imports from Japan. The Japanese cotton industry has been passing through a period of depression since the financial crisis that occurred in that country in the spring of 1927. The output of the companies, forming the Japanese Cotton Spinners' Association, was curtailed from May 1927, by restricting the number of spindles to be worked, the percentage of idle spindles, during the first six months, being 15 and, from the middle of November 1927, approximately 20. Imports from China, on the other hand, showed a remarkable advance. Costs of production in China are reported to be lower than in Japan ; and further, the Japanese-controlled mills in China, unable to dispose of their goods in the Chinese markets owing to the disturbed political conditions in that country, sent large consignments to the Indian market. Other sources of imports of yarn to India were the Netherlands (588,000 lbs.), Switzerland (484,000 lbs.) and Italy (425,000 lbs.). In the preceding year supplies from these countries amounted to 486,000, 691,000 and 314,000 lbs. respectively.

Cotton Yarn.—From 22nd September 1927, the import duty on cotton yarn was modified from 5 per cent. to 5 per cent. or 1½ annas per lb., whichever is higher. The incidence of the duty thus falls more heavily on the lower than on the higher grade yarns.

The production of yarn in Indian mills exceeded even the record attained in 1926-27 and amounted to nearly 809 million lbs.

The United Kingdom's share in the total trade in cotton twist and yarn fell from 41 per cent. in 1926-27 to 39 per cent. Japan's share fell from 54 per cent. to 32 per cent. while China's share advanced from 2 per cent. to 25 per cent.

Cotton piece goods The imports of cotton piecegoods, including fents, exceeded the preceding year's receipts by 185 million yards, though, in value, the increase registered was only R12 lakhs. Compared with the pre-war year 1913-14 the imports in 1927-28 were less by over 1,200 million yards, but the year's record was the highest since 1916-17. The figures for the three important classes of cotton piecegoods from 1913-14 onwards is set forth in the table below:

—	Grey (unbleached).	White (bleached)	Coloured, printed or dyed.
Year.	Million yards.	Million yards.	Million yards.
1913-14 ..	1,534·2	793·3	831·8
1914-15 ..	1,320·2	604·2	494·8
1915-16 ..	1,148·2	611·4	358·7
1916-17 ..	847·0	589·8	454·9
1917-18 ..	625·5	502·3	395·6
1918-19 ..	583·4	286·6	227·3
1919-20 ..	533·3	322·0	208·3
1920-21 ..	580·2	421·8	489·3
1921-22 ..	635·6	306·2	138·3
1922-23 ..	931·0	402·5	243·8
1923-24 ..	704·0	415·3	347·5
1924-25 ..	845·5	548·9	407·0
1925-26 ..	709·1	465·1	365·8
1926-27 ..	748·4	571·0	447·4
1927-28 ..	875·5	556·5	504·8

The imports of **coloured, printed and dyed gods** from 1921-22 are set forth below:—

—	1921-22.		1922-23.		1923-24.		1924-25.		1925-26.		1926-27.		1927-28.	
	Million yards.	Rs. (lakhs.)	Million yards.	Rs. (lakhs.)	Million yards.	Rs. (lakhs.)	Million yards.	Rs. (lakhs.)	Million yards.	Rs. (lakhs.)	Million yards.	Rs. (lakhs.)	Million yards.	Rs. (lakhs.)
Total printed goods.	84·7	4,23	128·5	6,25	182·5	8,14	189·0	8,12	166·9	6,55	176·8	6,13	235·3	7,53
Total dyed goods.	34·9	2,09	77·6	3,98	110·1	6,12	142·2	7,54	106·8	4,88	157·0	6,17	158·3	5,61
Total woven coloured goods.	18·7	1,27	37·7	2,37	54·9	3,43	75·8	4,36	92·1	4,49	113·6	4,92	111·2	4,38

The large increase in the imports of printed goods is specially noteworthy. Detailed figures relating to the principal descriptions of **imported piece-goods** are given below (in millions of yards) :—

Grey (unbleached.)	1913–14 (pre-war year)	1926-27.	1927-28.	White (bleached.)	1913-14 (pre-war year.)	1926–27.	1927–28.	Coloured, printed or dyed.	1913–14 (pre-war year.)	1926–27.	1927–28.
Dhuties, saris and scarves.	806·1	471·6	527.6	Dhuties, saris and scarves.	104.3	114·0	71.7	Dhuties, saris and scarves.	115·2	35·5	38·4
Jaconets, madapollams, mulls, etc.	150·4	72·6	78.9	Jaconets madapollams, mulls, etc.	307.9	234·8	224.5	Cambrics, etc.	113·6	43·2	50·4
Longcloth & shirtings.	545·4	168.8	233·4	Longcloth & shirtings.	115·3	97·4	112·1	Shirtings ..	152·6	90·8	88.7
Sheetings ..	·2	18·3	23.0	Nainsooks...	204·7	65·9	93·0	Prints and chintz.	209·7	50·5	69·9
Drills and jeans.	21·3	14·9	11.2	Drills and jeans.	5·7	5·1	6·9	Drills and jeans.	30·0	44·9	64·2
				Checks, spots and stripes.	16·1	12·3	14·1	Checks, spots and stripes.	19·7	17·0	18·4
				Twills ..	.3	11·8	14·9	Twills ..	31·4	29·0	40·5
Other sorts .	10·8	2·2	1.4	Others sorts.	31·0	29·7	19·3	Other sorts.	159·6	136·5	134·3
TOTAL ..	1,534·2	748·4	875.5	Total ..	793·3	571·0	556.5	TOTAL ..	831·8	447·4	504·8

The United Kingdom's share in the imports of grey goods increased from 589 million yards to 651 million yards, an advance by 62 million yards or 11 per cent. The Japanese share increased by about the same amount from 155 million yards to 215 million yards. The imports from China (including Hongkong) advanced from 1·8 million yards to 7 million yards, but the share of the United States of America receded from 2.7 million yards to 2·2 million yards. White goods, as usual, were derived principally from the United Kingdom, which sent 527 million yards as against 550 million yards in the preceding year. Switzerland's share increased by 3½ million yards to 12 million yards and that of Japan from 2.9 million yards to 5·6 million yards. The Netherlands sent 7½ million yards. The British share in the import of white piecegoods was 95 per cent. as against 96 per cent. in 1926-27 and 1925-26.

In the imports of coloured, printed or dyed piecegoods the United Kingdom's share increased by 34 million yards to 352 million yards. Italy has been pushing her trade in this line, her contribution during the year amounting to 24½ million yards as against 15½ million yards in 1926-27 and 9·8 million yards in 1925-26. The Japanese share which is more considerable has also been advancing continuously, 102·7 million yards having been sent from that country in 1927-28 as against 85·8 million yards in 1926-27 and 69½ million yards in 1925-26.

Percentage share of the United Kingdom and Japan in the imports of cotton piecegoods.

—	1913-14		1924-25		1925-26		1926-27		1927-28	
	United Kingdom	Japan	United Kingdom	Japan	United Kingdom	Japan	United Kingdom	Japan	United Kingdom	Japan
Cotton piecegoods—										
Grey	98.8	.5	76.0	13.0	79.2	20.1	78.7	20.7	74.4	24.5
White	98.5	..	97.1	.8	96.0	1.0	96.4	.5	97.7	1.0
Coloured ..	92.6	.2	83.1	10.0	73.1	19.0	71.1	19.2	69.8	20.3

Wool, raw and Manufactured (Rs. 5,37 lakhs).—Imports of raw wool advanced from nearly 5 million lbs. valued at Rs. 32 lakhs in 1926-27 to 5·8 million lbs. valued at Rs, 45 lakhs in 1927-28.

There has been a steady advance in the imports of woollen piecegoods in recent years. Imports in 1927-28 amounted to 18·8 million yards as against 15½ million yards in the preceding year and were valued at Rs. 3,28½ lakhs, an increase of 22 per cent. in quantity and 18 per cent. in value over 1926-27.

Artificial silk (Rs. 5,49 lakhs)—The figures in the marginal table are evidence of the increasing absorption of artificial silk yarn, the imports in 1926-27 being 116 per cent. over that of the previous year, while the increase in 1927-28 over the preceding year was 30 per cent. The lead in this line established by Italy since 1925-26 was maintained in 1927, but the United Kingdom was a colse competitor. Very nearly the whole of the increase in the imports during the year was contributed by that country, the British product commending itself by its quality for use in mills for the production of cotton and artificial silk mixtures. The quantities imported from Italy and the United Kingdom during 1927-28 were 3,432,000 lbs. and 2,277,000 lbs. as compared with 3,843,000 lbs. and 655,000 lbs. in the preceding year. It will be seen that the imports from Italy during 1927-28 were a little less than in 1926-27, while the British trade registered an advance of 248 per cent.

Imports of Artificial silk yarn.

	lbs. (000)	Rs. (000)
1922-23	225	13,40
1923-24	406	19,55
1924-25	1,171	42,40
1925-26	2,671	74,72
1926-27	5,776	1,02,64
1927-28	7,510	14,921

Silk, raw and Manufactured (Rs. 5,06 lakhs).—India's absorption of raw silk has been increasing in recent years. Imports in 1925-26 were 1,325,000 lbs., in 1926-27 1,783,000 lbs. and in the year under review 2,356,000 lbs. The bulk of the imports came, as usual, from China (including Hongkong), 2,270,000 lbs. being derived from that source.

Metals and Manufactures thereof (Rs. 28,40 lakhs).—The imports of metals and manufactures thereof increased by 38 per cent. in quantity from 910,000 tons to 1,259,000 tons and by 19 per cent. in value from nearly Rs. 24 crores to over Rs. 28½ crores. Iron and steel represented Rs. 21½ crores of this total and rose to the second place in order of importance among imports, displacing sugar which occupied that position in the preceding year. If such items as machinery and mill-work, railway plant and rolling stock, cutlery, hardware, implements and instruments, and motor vehicles are included in one head with metals and manufactures thereof the aggregate value would amount to Rs. 65½

Number of motor vehicles registered in British India up to 31st March 1928

Provinces	Motor cars including taxi-cabs	Motor cycles including scooters and auto-wheels	Heavy motor vehicles (lorries buses etc.)	TOTAL
	Number	Number	Number	Number
Bengal including Calcutta	23,995	3,964	2,546	30505,
Bombay City	8,549(*a*)	560(*a*)	788(*a*)	9,897,(*a*)
Bombay Presidency (excluding Bombay City and Sind).	7,527(*a*)	622(*a*)	107(*a*)	8,256(*a*)
Madras City	9,178	2,416	1,151	12,745
Madras Presidency (excluding Madras City). ..	4,817	1,664	4,087	10,668
United Provinces	7,352	2,415	2,527	12,294
Punjab	10,836	3,371	316	14,523
Burma	11,444	2,903	3,409	17,756
Bihar and Orissa	5,250	950	983	7,183
Central Provinces	3,564	935	984	5,483
Sind	2,578	882	141	3,601
Delhi	3,735	876	412	5,023
North-West Frontier Province	2,051	1,213	769	4,034
Ajmer-Merwara	261	94	35	390
Assam (*b*)	1,454	299	753	2,506
TOTAL ..	102,692	23,164	19,008 ..	144,864

(*a*) Represent number of Vehicles re-registered during the year ending 31st March 1928.

(*b*) Figures relate to the year ended 31st December 1927.

crores; this figure may be compared with the value of yarn and textile fabrics, the most important group among imports, *viz.*, Rs. 81 crores. The corresponding figures for the preceding year were, for the metals group, Rs. 56 crores and, for textiles, Rs. 79 crores.

Iron and steel (Rs. 21,14 lakhs).—The United Kingdom is the largest supplier of iron and steel materials to India and the imports from that country, which in the preceding year had been affected by the British coal strike of 1926, recovered during 1927 and reached a record figure. The output of pig-iron in the United Kingdom rose from 2½ million tons in 1926 to over 7 million tons in 1927, while the production of steel ingots and castings rose from 3½ million tons to over 9 million tons. British steel-makers also made very great efforts during the year to reduce prices to meet foreign competition.

Other metals (Rs. 6,96 lakhs).—Imports of metals' other than iron and steel fell from 64,000 tons to 62,000 tons in quantity and from Rs. 7,06 lakhs to Rs. 6,96 lakhs in value. The imports of aluminium increased from 97,000 cwts, valued at Rs.95 lakhs in 1926-27 to 135,000 cwts. valued at Rs. 1,18½ lakhs in 1927-28.This represented a rise of 39 per cent. in quantity and of 25 per cent. in value.

Imports of brass decreased from 529,000 cwts. valued at Rs. 2,56½ lakhs to 508,000 cwts. valued at Rs. 2,33¾ lakhs. Mixed or yellow metal for sheathing,which formed 84 per cent. of the total quantity imported in 1927-28, increased slightly in quantity from 427,000 cwts. to 428,000 cwts. but declined in value from Rs. 2, 05 lakhs to Rs. 1,94½ lakhs. Imports from the United Kingdom increased from 121,000 cwts. valued at Rs. 60¼ lakhs to 168,000 cwts. valued at Rs. 75 lakhs. But, as in the preceding year, Germany retained her place as the chief supplier.

Imports of copper declined from 317,000 cwts. valued at Rs. 1,53 lakhs to 261,000 cwts. valued at Rs. 1,29 lakhs, Both unwrought and wrought copper (the latter consisting mostly of sheets) decreased,the former from Rs.24¾ lakhs to nearly Rs. 17 lakhs and the latter from Rs. 1,27 lakhs to Rs. 110 lakhs.

Machinery & Millwork (Rs. 16,99 lakhs)—In 1926-27 machinery and millwork had fallen to the fourth place in order of importance in India's import trade. In 1927-28 there was as considerable increase in imports and this head

ranked third in importance, coming next to cotton manufactures and iron and steel. The total imports of machinery of all kinds including belting for machinery and printing presses, during 1927-28 were valued at Rs. 16,99 lakhs, as compared with Rs. 14,60 lakhs in 1926-27 and Rs. 15,87 lakhs in 1925-26. An important contributing factor to the increase in the import trade was the removal or reduction of the custom duties on certain kinds of machinery from 1st October 1927, effected in pursuance of the recommendations of the Indian Tariff (Cotton Textile Board).

The value of all kinds of textile machinery imported increased by 23 per cent from Rs. 2,51½ lakhs to R3,08⅝ lakhs, of which the United Kingdom's supplies accounted for Rs. 2,89 lakhs or 94 per cent. In the preceding year she was responsible for 95 per cent of the imports) with a total value of Rs. 2,40 lakhs. Imports of cotton machinery were steadily on the decline for some years, but the tendency was arrested in 1927-28 imports amounting to Rs. 1,97 lakhs as compared with Rs. 1,70½ lakhs in 1926-27. Spinning and weaving machinery showed increases of Rs. 21 and Rs. 12 lakhs, respectively Jute manufacturing machinery advanced from Rs. 64⅜ lakhs to Rs. 94 lakhs, while wool manufacturing machinery fell from Rs. 4 go Rs. 1⅝ lakhs. Imports of electrical machinery declined from Rs. 2,29¾ lakhs to Rs. 2,00 lakhs, decrease being noticiable in the case of transformers and generating plant.

Railway plant and rolling stock (Rs. 9,35 lakhs).—The total imports on private and Government account registered under this head (which,it may be remarked, excludes rails, chairs fishplates, etc., for railways) rose from Rs. 6, 08 lakhs to Rs. 9,35 lakhs,of which Rs.4,77 lakhs represented importations on private account and Rs. 4,58 lakhs on Government account as against R3,25 lakhs and R2,83 lakhs, respectively under corresponding heads in the preceding year.

Motor vehicles(Rs.6,18 lakhs).—There was a general lowering of the prices of motor vehicles during the year. This was due mainly to the reduction of the duty on motor cars and motor cycles from 30 to 20 per cent *ad valorem* and on pneumatic rubber tyres and tubes from 30 to15 per cent from 1st March 1927, and also to the keen competition in the automobile trade. The effect is plainly traceable in the import statistics. Leaving out of account 1920-21, when boom eondtions and lower duties prevailed, the year proved to be a record one for the imports of motor cars. The number of cars imported rose by 15 per cent from 13, 197 in 1926-27 to 15,122 in 1927-28, and their value by 20 per cent from Rs. 2,94 lakhs to Rs. 3,54 lakhs.

Sugar (Rs. 14,91 lakhs).—Increase in world production and fall in prices were the principal features of the sugar market. The world production of sugar in the season 1927-28 has been estimated at 25,118,000 tons, showing an increase of 1,371,000 tons over the preceding year, in spite of the reduction of the Cuban crop to 4 million tons. The actual production of the 1927-28 crop in Java has been estimated at 2,359,000 tons as compared with 1,960,000 tons in 1926-27. The total production of beet sugar in Europe in the season 1927-28 has been estimated at about 8 million tons as compared with nearly 7 million tons in the preceding year.

India draws the bulk of her supplies of sugar from Java. At the beginning of the year stocks of sugar in India were ample to meet demands and with prospects of a surplus crop, importers were content to postpone purchases till a lower level of prices was reached. Their attitude was also influenced by the fact that both Japan and China were ruled out as large buyers in consequence of financial troubles in the former country and civil turmoil in the latter At the same time, prospects of the beet crop in Europe were also bright and India remained the only big market available for Java. Consequently Indian importers were able to exert pressure on Java and bring down rates. During the first two months prices at Calcutta fluctuated between Rs. 11-0-0 and Rs. 11-8-0 per maund. In June prices fell below R11 and, with small fluctuations, dropped further to Rs. 10-2-0 per maund by the 22nd of July. In August and September the market was firmer,but in October prices again slummed,Rs.10-1-6 being reached on the 28th of the month. After a temporary spurt in November, prices again took a downward course in December and fell to R9-11-0per maund towards the close of January. This level was more or less maintained till nearly the close of March when a slight appreciation took place in consequence of a revival of Chinese demand for Java sugar.

In the Bombay market the quotation for Java, white, granulated, T.M.O. quality, stoop at Rs. 16-2-0 per cwt. (Rs. 11-13-7 per maund on the 1st April. There were temporary ups and downs during the rest of the month, but May saw a definitely lower tendency which carried prices to R14-8-0 per cwt. (R10-10-6 per maund) on the 8th July. August and September saw a slightly firmer market but rates sagged again in October, and continuedto show, on the whole, a downward tendency in succeding months,Rs. 14 per cwt. (Rs. 10-4-7 per maund) being recorded on the 23rd of February. The close of the year saw a firmer tendency, the quotation on the 30th March being Rs. 15-2-0 per cwt. (Rs.11-2-0 per maund).

Sugar—Imports of sugar of all sorts excluding molasses, in 1927-28 declined from 826,900 tons valued at Rs. 18,36 lakhs to 725,800 tons valued at Rs. 14,50 lakhs. The decline was at the expense of beet sugar, while cane sugar actually recorded an increase as a result of low price.

Mineral Oils (Rs. 10,44 lakhs).—The total foreign imports of all kinds of mineral oils amounted to 232 million gallons valued at over Rs. 10,44 lakhs as compared with 184 million gallons valued at Rs. 8,89 lakhs in the preceding year. About 41 per cent. of the total imports consisted of kerosene oil, 46 per cent. of fuel oil and 11 per cent. of lubricating oils.

The table shows the sources of the imports of kerosene during the past three years and the pre-war year 1913-14. Imports from the United States of America, from which nearly half of the supplies were received as against 87 per cent. in the preceding year, amounted to over 47 million gallons valued at over Rs. 3,09 lakhs. Imports from Russia, including Georgia, amounted to over 19½ million gallons valued at Rs. 1,03 lakhs.

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The table shows the sources of the imports of kerosene during the past three years and the pre-war year 1913-14. Imports from the United States of America, from which nearly half of the supplies were received as against 87 per cent. in the preceding year, amounted to over 47 million gallons valued at over Rs. 3,09 lakhs. Imports from Russia, including Georgia, amounted to over 19½ million gallons valued at Rs. 1,03 lakhs.

Imports of Kerosene Oil.	1913-14 (pre-war year.)	1925-26.	1926-27.	1927-28.
	Gallons (1,000).	Gallons (1,000).	Gallons (1,000).	Gallons (1,000).
United States	42,311	56,249	55,585	47,133
Borneo (British and Dutch)	20,815	11,457	5,327	12,393
Persia	2,303	....	....	9,440
Straits Settlements	2,340	4,719	2,694	3,955
Russia	1,079	....	....	3,847
Georgia	....	4,311	....	15,655
Egypt	....	809	....	....
Sumatra	....	1,673	392	13
Other countries	2	4	52	1,970
Total ..	68,850	79,222	64,050	94,406

Provisions (Rs. 6,41 lakhs).—Imports of provisions, including confectionery, rose during the year to Rs. 6,41 lakhs from Rs. 5,78 lakhs in 1926-27. The principal heads which showed increases were biscuits and cakes, canned and bottled provisions, milk foods for infants and invalids, and condensed milk. Canned and bottled provisions which accounted for 47 per cent. of the total value of imported provisions rose from 537,000 cwts, to 667,000 cwts. in quantity and from Rs. 2,54 lakhs to Rs. 3,01 lakhs in value. The increase was due to larger receipts of vegetable product imports of which totalled 444,000 cwts. valued at Rs. 1,92 lakhs.

Liquors (Rs. 3,67 lakhs).—Imports of liquors during 1927-28 amounted to 7,118,000 gallons valued at Rs. 3,67 lakhs as against 6,261,000 gallons valued at Rs. 3,53 lakhs in 1926-27. There was thus an increase of 857,000 gallons or 14 per cent. in quantity and of Rs. 14 lakhs or 4 per cent. in value as compared with the preceding years' figures. The increase was shared by all the maritime provinces. Bengal with 2,142,000 gallons, valued at Rs. 1,09 lakhs occupied the first place among the distributing centres both as regards the quantity and the value of imports.

Paper and Paste board (Rs. 3,01 lakhs).—The quantity of paper and pasteboard imported rose by 4 per cent. from 100,400 tons in 1926-27 to 104,400 tons in 1927-28, but lower prices accounted for a decline in value by Rs. 7 lakhs to Rs. 3,01 lakhs. Imports of news printing paper fell from 20,900 tons to 16,000 tons and in value from Rs. 59½ lakhs to Rs. 39⅗ lakhs, while other kinds of printing paper advanced from 9,400 tons valued at Rs. 40⅗ lakhs to 10,900 tons valued at Rs. 44⅓ lakhs.

Chemicals (Rs. 2,63 lakhs)—The total imports of chemicals into India were valued at Rs. 2,65 lakhs in 1927-28 and showed an increase of Rs. 21 lakhs over the preceding year's figure of Rs. 2,44 lakhs. Soda compounds which accounted for 42 per cent. of the total value of the imports were valued at Rs. 1,12 lakhs, of which the United Kingdom supplied to the value of Rs. 95 lakhs.

Salt (Rs. 1,75 lakhs).—The quantity of foreign salt imported into India increased by 10 per cent. from 542,000 tons in 1926-27 to 596,000 tons in 1927-28, while the value of the shipments rose by 38 per cent. from Rs. 1,26 lakhs to Rs. 1,75 lakhs. It is estimated that about 90 per cent. of imported salt is fine white crushed salt, which is preferred by consumers in Bengal and also in Burma to salt of indigenous manufacture, while the remaining 10 per cent. is white uncrushed salt ("karkatch") used normally for cattle.

Coal (Rs. 62 lakhs).—Imports of foreign coal which suffered a serious set-back in 1926-27 in consequence of the British coal strike made some recovery during the year, arrivals totalling 263,000 tons, valued at Rs. 58½ lakhs, as compared with 142,000 tons valued at Rs. 31⅓ lakhs in the preceding year. There was thus an increase of 85 per cent. in quantity and of 86 per cent. in value. Compared with 1925-26, however, the figures showed a decrease of 29 per cent. in quantity and of 34 per cent. in value. Natal increased her supplies to 155,000 tons as compared with 114,000 tons in 1925-26 and 86,000 tons in 1926,27. Supplies from the United Kingdom, although higher than in 1926-27, were much below those of 1925-26 and

amounted to 52,300 tons. Portuguese East Africa also was unable to regain her former position and imports from that country amounted to 35,000 tons as compared with 126,000 tons in 1925-26. Australian coal was less in demand in Madras and Burma, these provinces showing a preference for Indian coal.

The following Table shows the principal sources of supply of foreign coal :—

——	1924-25.	1925-26.	1926-27.	1927-28.
	Tons.	Tons.	Tons.	Tons.
United Kingdom	108,000	97,000	13,000	52,000
Natal	3,000	4,000	86,000	155,000
Japan	10,000	1,000	11,000	6,000
Portuguese East Africa	118,000	126,000	26,000	35,000
Australia	14,000	12,000	13,000	9,000

Matches (Rs. 39 lakhs.)—Since the imposition of high specific duties on the imports of matches from March 1922 numerous match factories have been established in India, and a fair proportion of Indian requirements is now being met by locally produced matches. There has, therefore, been a substantial decline in the imports of foreign matches which fell from 11 million gross of boxes in 1923-24 to 7 million gross in 1924-25, 6 million gross in 1926-27 and to 3½ million gross in 1927-28. The corresponding value figures were Rs. 1,46 lakhs in 1923-24, Rs. 89 lakhs in 1924-25, Rs. 66 lakhs in 1926-27 and Rs. 39⅓ lakhs in 1927-28. The 1927-28 figures represented a decrease of 42 per cent. in quantity and 40 per cent. in value as compared with 1926-27.

The following table shows the comparative importance of the principal articles exported from British India :—

(In thousands of Rupees)

	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	Percentage of proportion to total exports of merchandise in 1927-28.
Jute, raw	20,00,06	29,09,30	37,94,57	26,78,04	30,66,26	9.61
Jute manufactures ..	42,28,36	51,76,66	58,83,09	53,18,09	53,56,43	16.78
Cotton, raw and waste..	99,71,83	91,96,30	95,91,42	59,14,19	48,15,53	15.09
Cotton manufactures ..	10,95,49	11,27,48	9,64,85	10,74,85	8,67,23	2.72
Grain, pulse and flour ..	50,87,15	65,06,04	48,03,39	39,24,90	42,92,03	13.45
Tea	31,64,61	33,39,24	27,12,17	29,03,77	32,48,49	10.18
Seeds	29,81,72	33,16,85	29,63,68	19,08,77	26,69,30	8.36
Leather	6,00,77	7,28,87	7,10,21	7,37,69	9,07,27	2.84
Metals and ores	5,78,25	7,18,92	7,28,83	7,20,86	8,97,08	2.81
Hides and skins, raw ..	6,93,25	6,77,41	7,23,38	7,17,97	8,80,94	2.76
Lac	9,06,27	7,55,06	6,00,10	5,47,24	6,98,86	2.19
Wool, raw and manufactured.	4,00,12	6,21,32	4,59 48	4,68,28	5,33,38	1.67
Oilcakes	1,94,10	2,20,00	2,10,62	2,52,76	3,14,19	.98

Exports—*continued.*

(In thousands of Rupees)

	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	Percentage of proportion to total exports of merchandise in 1927-28.
Rubber raw	1,14,46	1 42,94	2,94,10	2,60,14	2,57,09	.81
Paraffin wax	1,14,14	1,36,60	1,59,45	1,84,60	2,42,46	.76
Spices	1,10,86	1,06,75	1,76,28	1,55,97	2,39,96	.75
Coffee	1,57,46	2,08,95	1,85,26	1,32,63	2,31,92	73
Opium	2,66,31	1,47,24	1,93,37	2,11,85	1,99,09	.62
Wood and timber ..	1,27,09	1,40,97	1,95,74	1,62,04	1,65,73	.52
Dyeing and tanning substances	1,31,74	1,35,72	1,33,11	1,17,72	1,60,70	.51
Fodder, bran and pollards	1,28,46	1,58,86	1,28,58	1,06,25	1,36,74	.43
Manures	1,58,89	1,26,68	1,17,49	1,25,40	1,28,01	.40
Coir	1,03,13	1,22,46	1,08,27	99,85	1,13,75	.36
Tobacco	1,02,97	1,25,04	1,11,04	1,04,15	1,06,13	.33
Fruits and vegetables ..	71,78	71,66	83,46	89,88	1,05,42	.33
Mica	86,37	1,02,71	1,04,71	1,08,41	92,84	.29
Fish (excluding canned fish)	62,84	72,32	76,44	75,38	87,13	.27
Hemp, raw	76,43	1,72,87	7,59,17	82,76	80,83	.26
Coal and coke	22,31	37,51	34,80	81,33	76,43	.24
Oils	2,90,03	3,44,10	1,79,27	95,71	70,98	.22
Provisions and oilman's stores	60,35	58,87	64,94	60,95	61,21	.19
Animals, living	26,60	31,42	34,62	38,32	46,87	.14
Silk, raw and manufactured	54,48	41,02	38,76	35,08	42,69	.13
Drugs and medicines ..	28,98	35,87	36,77	37,10	34,53	.11
Fibre for brushes and brooms	23,73	26,28	22,20	25,34	29,63	.09
Apparel	24,83	29,45	23,90	22,30	23,82	.08
Cordage and rope ..	15,12	15,30	16,92	18,44	18,52	.06
Bristles	20,06	24,56	19,33	13,56	16,18	.05
Candles	15,15	11,59	15,86	8,81	12,55	.04
Saltpetre	26,87	27,18	20,28	12,12	12,13	.04
Tallow, stearine and wax	22,42	11,35	10,69	14,00	11,15	.03
Horns, tips, etc.	11,56	10,40	9,35	7,91	9,18	.03
Sugar	96,97	52,49	7,05	5,78	7,81	.02
All other articles ..	4,29,24	4,43,92	4,91,60	4,82,39	5,46,88	1.72
TOTAL VALUE OF EXPORTS	3,48,83,61	3,84,66,53	3,74,84,21	3,01,43,58	3,19,15,35	100

Jute and Jute Manufactures (Rs. 84,23 lakhs)).—Two successive good crops and a steady demand for both the raw material and manufactured articles enabled the total exports during the year under this head to beat previous records as regards the quantity shipped.

The total weight of raw and manufactured jute exported during the year amounted to 1,777,000 tons, or 208,000 tons more than in the preceding year, while the total value increased from Rs. 80 crores to Rs. 84·2 crores, Raw jute accounted for 36 per cent. of this value and jute manufactures for 64 per cent. as compared with 33 and 67 per cent. respectively in 1926-27. The following statement compares the quantities exported during 1913-14 and each of the past three years:—

—	1913-14.	1925-26.	1926-27.	1927-28.
Jute (in thousand tons)	768	647	708	892
Bags (in millions)	369	425	449	463
Cloth (in million yards)	1,061	1,461	1,503	1,553

Cotton(Rs. 47,72).—The Indian cotton crop of the season 1927-28 has been estimated at 5,871,000 bales of 400 lbs. each as compared with 5,024,000 bales in the preceding year. The American crop of 1927 was a short one, unlike the crops of the three preceding years, its yield being estimated at 12,955,000 bales of 500 lbs. each (16,194,000 bales of 400 lbs. each). The Egyptian crop of the season also gave a smaller yield, the output being estimated at 1,496,000 bales of 400 lbs.

Exports of Indian cotton in bales of 400 *lbs.*

—	Pre-war average 1909-14.	1924-25.	1925-26.	1926-27.	1927-28.
April	303,600	348,900	430,100	385,400	226,100
May	248,800	283,500	405,900	295,200	200,600
June	218,900	253,300	452,400	280,100	240,300
July	190,100	138,000	308,400	237,800	180,400
August	110,300	109,300	208,400	208,200	201,600
September	75,300	113,800	136,000	104,700	152,800
October	66,800	62,300	87,400	39,300	88,300
November..	101,400	63,800	120,200	62,000	93,500
December	158,200	266,700	306,100	153,900	193,700
January	319,800	459,500	540,300	446,100	400,600
February	318,300	594,100	632,500	398,600	323,500
March	295,800	633,200	545,700	576,700	384,800
TOTAL ...	2,407,300	3,326,400	4,173,400	3,188,000	2,686,200

Exports from Bombay were 63 per cent. of the total quantity of raw cotton exported, those from Karachi 27 per cent. and from Madras 5 per cent. as compared with 66,26. and 5 per cent respectively in 1926-27.

Cotton Manufactures (Rs. 8,67 lakhs).—The cotton industry passed through another period of depression in 1927-28. Production both of yarn and piece goods increased, but exports declined and stocks accumulated. The production of yarn in Indian mills in 1927-28 increased to 809 million lbs. as compared with 807 million lbs. in the preceding year and 687 million lbs. in 1925-26.

Exports of yarn fell by 40 per cent. in quantity from 41½ million lbs. in 1926-27 to 24¾ million lbs. in the year under review. The average exports in the five years ending 1913-14 were 193 million lbs. while the average of the war period was 130 million lbs, and of the post-war quinquennium 82 million lbs. The value realised fell from Rs. 3,08½ lakhs to Rs. 1,88 lakhs, a decline of 39 per cent. China, usually the most important market, took only .8 million lbs., as compared with 16.8 million lbs. in the preceding year. Far from being a buyer, she was actually selling large quantities of her cotton yarn in the Indian market, undercutting both the local product and the imports from other sources.

Piece-goods (Rs. 6,18½ lakhs).—The production of piece-goods in Indian mills in 1927-28 increased in quantity by 4 per cent. as compared with the preceding year. The proportion of the exports of piece-goods to the total production was 7 per cent. in 1927-28 as compared with 8.7 per cent. in 1926-27 and 8.4 per cent. in 1925-26. The actual quantity exported compared with that of the preceding year, declined by 29 million yards.

—	1913-14 Pre-war (year).	1925-26.	1926-27.	1927-28.
	Million yards.	Million yards.	Million yards.	Million yards.
Grey and bleached piece-goods—				
Shirtings	2.2	4.3	.2	2.1
Chadars and dhutis..	7.6	9.1	3.7	3.8
T. cloth and domestics	21.6	13.3	2.0	1.4
Drills and jeans	.6	2.9	.6	.4
Other sorts	12.2	8.7	15.0	11.6
TOTAL ..	44.2	38.3	21.5	19.3
Coloured piece-goods	45.0	126.5	175.9	149.3
TOTAL PIECE-GOODS	89.2	164.8	197.4	168.6

Foodgrains and flour (Rs. 42,92 lakhs).—Exports under this head made some recovery, as a result chiefly of larger shipments of wheat. The total quantity exported amounted to 2,784,000 tons as against 2,429,000 tons in the preceding year, the value of the shipments rising by Rs. 3,67 lakhs to Rs. 42,92 lakhs. Shipments of wheat increased by 70 per cent. from 176,000 tons to 300,000 tons and rice not in the husk by 117,000 tons to 2,152,000 tons. Exports of barley, which were insignicant in the preceding year, amounted to 72,000 tons. Other items also showed small increases. The detailed exports during the past three years, compared with the average exports under each head in the pre-war quinquennium, are set forth in the table below :—

—	Pre-war average.	1925-26.	1926-27.	1927-28.
	Tons (000).	Tons (000).	Tons (000).	Tons (000).
Rice not in the husk	2,398	2,549	2,035	2,152
,, in the husk	42	33	23	34
Wheat	1,308	212	176	300
,, flour	55	67	59	60
Pulse	291	139	118	133
Barley	227	42	2	72
Jowar and bajra	41	14	15	21
Maize	} 49	{ 2	..	9
Other sorts		2	1	3
TOTAL Tons (000) ..	4,411	3,063	2,429	2,784
VALUE Rs. (lakhs). .	45,81	48,03	39,25	42,92

Tea (Rs. 32,48 Lakhs).—The tea industry had another prosperous season in 1927-28. The production of tea in the season fell short of the preceding year's record, but exports rose, and prices throughout the season were well maintained.

The total production of tea in India in 1927 is estimated at 391 million lbs. as compared with 393 million lbs. in 1926 and 364 million lbs. in 1925. As usual, Assam contributed the largest share, her production being 60 per cent. of the total output, while Northern India, excluding Assam, contributed 26 per cent. and Southern India 14 per cent. The total area under tea in 1927 was 753,000 acres as against 739,000 acres in 1926.

Exports of Tea by Sea to Foreign Countries.

—	1905-06	1915-16	1924-25	1925-26	1926-27	1927-28
	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)
From Northern India (Calcutta and Chittagong)	199,737	301,403	299,747	280,024	304,957	315,109
From Southern India (Madras Ports).. ..	12,680	25,840	37,717	43,133	42,935	45,744
From Bombay, Sind and Burma	1,807	11,227	2,643	2,576	1,372	761
TOTAL ..	214,224	338,470	340,107	325,733	349,264	361,614

In 1927-28, 92 per cent. of the total quantity of tea produced in India was export overseas.

Oilseeds (Rs. 26,69 Lakhs.)—Oilseeds occupied the fifth place among exports, the first four being raw and manufactured jute, cotton, food-grains and tea. Indian supplies were moderately satisfactory and in the case of groundnuts plentiful, while demand improved considerably. The total exports amounted to 1,210,000 tons valued at Rs. 26,69 lakhs, showing an increase of 44 per cent. in quantity and 40 per cent. in value over the preceding year's figures. Compared with the pre-war average there was, however, a decrease of 17 per cent. in quantity but an increase of 9 per cent. in value. The table shows the average quantities of the principal seeds exported during the last three years and the pre-war quinquennium.

	Pre-war	1925-26	1926-27	1927-28
	(Thousands of Tons)			
Linseed ..	379	308	192	222
Rape seed ..	273	112	94	66
Groundnuts	212	455	368	613
Castor ..	114	110	102	122
Cotton ..	240	197	51	153
Sesamum ..	119	40	2	11
Copra ..	31	..	2	..
Others ..	85	28	27	23
TOTAL ..	1,453	1,250	838	1,210

Hides and Skins (Rs. 17,88 Lakhs).—The trade showed a marked improvement in 1927-28 owing to a world shortage of hides and leather. The leather stocks of the world have been greatly depleted, and the available supply of hides is insufficient to meet the increasing demand. Prices advanced, hides and heavy leather benefits most, and the total exports under this had increased in value by 23 per cent. to Rs. 17·88 lakhs. Tanned hides contributed most to this increase, but was followed closely by raw hides. Shipments of raw hides and skins during the year amounted to 64,400 tons valued at Rs. 8,81 lakhs as compared with 50,600 tons valued at Rs. 7,18 lakhs in 1926-27. Sixty-three per cent. of the exports consisted of raw hides which advanced by 12,800 tons to 40,700 tons in quantity and by Rs. 1,27 lakhs (49 per cent.) to Rs. 3,85 lakhs in value. Raw skins, on the other hand, had less demand and fell slightly to 19,400 tons as compared with 19,700 tons in 1926-27, though the value of the shipments increased by 7 per cent. or Rs. 33 lakhs to Rs. 4,89 lakhs. Exports of tanned or dressed hides and skins increased from 18,400 tons to 23,300 tons in quantity and in value from Rs. 7,37⅔ lakhs to Rs. 9,07½ lakhs. Tanned hides advanced from 11,300 tons valued at Rs. 2,78 lakhs to 15,800 tons valued at Rs. 4,12 lakhs, a quantity increase of 39 per cent. and a value increase of 48 per cent. Tanned skins gained by 500 tons (6 per cent.) in quantity and by Rs. 35⅔ lakhs (8 per cent.) in value.)

Lac (Rs. 6,99 Lakhs).—The exports of lac fell by 8 per cent. in quantity from 592,000 cwts. in 1926-27 to 544,000 cwts. in 1927-28, but higher prices accounted for an increase in value by 28 per cent. from Rs. 5,47 lakhs to Rs. 6,99 lakhs. Of the total quantity shipped in 1927-28 about 74 per cent. represented shellac, and 3 per cent. button lac, while the remaining 23 per cent. consisted of seed lac, stick lac and other sorts.

Raw wool (Rs. 4,36 Lakhs).—The trade in raw wool continued to expand, exports rising from 45 million lbs. to 50 million lbs. in quantity and from Rs. 3,93 lakhs to Rs. 4,36 lakhs in value. Of the total quantity shipped, the United Kingdom took nearly 44 million lbs. or 87 per cent. as compared with 40½ million lbs. or 91 per cent. in the preceding year, while the remainder went mainly to the United States of America, shipments to which country rose from 3.6 million lbs. to 5·2 million lbs. Besides Indian wool, a fairly large proportion of foreign wool of Tibetan and Central Asian origin, imported across the frontier, is re-exported from India.

Oils (Rs. 71 Lakhs).—The total value of the exports of oils of all sorts as compared with the preceding year declined by Rs. 25 lakhs or 26 per cent. to Rs. 71 lakhs in 1927-28. Owing chiefly to increase in home consumption, exports of petroleum, dangerous, flashing below 76° F. (including petrol, benzine and benzol) fell from 8 million gallons in 1925-26 and 2 million gallons in 1926-27 to only 2,900 gallons in 1927-28. The corresponding value figures were Rs. 92 lakhs in 1925-26, Rs. 24 lakhs in 1926-27 and Rs. 3,500 only in 1927-28. On the other hand, the total sales of petrol in India continued to advance and amounted to nearly 45 million gallons in 1927 as compared with 33 million gallons in 1926 and 26 million gallons in 1925.

Exports of vegetable oils fell from 1,307,000 gallons valued at Rs. 31 lakhs to 1,93,000 gallons valued at Rs. 29 lakhs.

Metals and ores (Rs. 8,97 Lakhs).—The total exports of ores amounted to 760,000 tons as compared with 584,000 tons in the preceding year.

Manganese ore represented 93 per cent of the total quantity of ores exported. Exports of manganese ore increased from 536,000 tons valued at Rs. 1,49 lakhs to 704,000 tons valued at Rs. 1,95 lakhs. Nearly 424,000 tons were shipped from Bengal and 266,000 tons from Bombay, while the remainder was sent from Madras. Imports into the United Kingdom were low during the preceding year, owing to the depression in the British steel industry consequent on the coal strike of 1926. The demand from the United Kingdom revived and she took 234,000 tons as against 58,000 tons in the preceding year. Germany took nearly 15,000 tons and the Netherlands an equal amount. German demands have not yet recovered to the 1925-26 level when she took more than 30,000 tons. Belgium took 182,000 tons and France 150,000 tons as against 186,00 tons and 168,000 tons respectively in the preceding year. Japanese imports of Indian manganese ore amounted only to 3,300 tons as compared with 20,500 tons in the preceding year. The United States of America increased her requirements

to 97,200 tons from 71,300 tons in 1926-27.

Pig Iron (Rs. 1,79 Lakhs.—The production of pig iron in India increased from 957,000 tons in 1926-27 to 1,162,000 tons in 1927-28 and exports from 309,000 tons to 393,000 tons. The value of the exports rose from Rs. 1,40 lakhs to Rs.1,79 lakhs. Japan, the largest buyer, increased her takings from 234,000 tons to 271,000 tons and the United Kingdom from 16,000 tons to 21,000 tons.

The following figures show the production of pig iron and steel in India during the past three years. The figures are in thousands of tons.

—	1925-26	1926-27	1927-28
Production of pig iron	875	957	1,162
,, ,, steel	471	530	600
,, ,, finished steel	320	374	429

Air Routes : London-Alexandria-Karachi.

TIME TABLE OF THE JOURNEY.

We give below the provisional time-table for the London-Alexandria-Karachi service. The time-table is subject to alteration without notice :—

Eastbound.

		Lst.†	Gmt.*	Day.
London (Airways House)	dep.	06.00	05.00	Sat.
Croydon Aerodrome	dep.	06.45	05.45	,,
Paris (Le Bourget)	arr.	09.15	08.15	,,
Paris (Le Bourget)	dep.	10.00	09.00	,,
Basle (Birsfelden)	arr.	13.00	12.00	,,
§ Basle (Central Station)	dep.	14.42	13.42	,,
§ Genoa	arr.	03.40	02.40	Sun.
,,	dep.	07.00	06.00	,,
Rome (Ostia)	arr.	10.00	09.00	,,
,, ,,	dep.	11.00	10.00	,,
Syracuse	arr.	15.25	14.25	,,
,,	dep.	06.30	05.30	Mon.
Navarino	arr.	11.45	09.45	,,
,,	dep.	12.45	10.45	,,
Tobruk	arr.	16.00	15·00	,,
,,	dep.	06.30	05.30	Tue.
Alexandria (Harbour)	arr.	11.45	90.45	,,
Alexandria (Aboukir)	dep.	13.15	11.15	,,
Gaza	arr.	16.40	14.40	,,
,,	dep.	06.30	04.30	Wed.
Rutbah	arr.	11.45	08.45	,,
,,	dep.	12.30	09.30	,,
Baghdad (West)	arr.	15.00	12.00	,,
,,	dep.	15.45	12.45	,,
Basra	arr.	18.45	15.45	,,
,,	dep.	06.00	03.00	Thu.
Bushire	arr.	09.00	05.40	,,
,,	dep.	09.45	06.25	,,
Lingeh	arr.	14.10	10.15	,,
,,	dep.	14.55	11.00	,,
Jask	arr.	17.15	13.20	,,
,,	dep.	06.30	02.35	Fri.
Gwadar	arr.	11.35	06.05	,,
,,	dep.	12.20	06.50	,,
Karachi	arr.	16.00	10.30	,,

Westbound.

		Lst.†	Gmt.*	Day.
Karachi	dep.	07.30	02.00	Mon.
Gwadar	arr.	11.10	05.40	,,
,,	dep.	11.55	06.25	,,
Jask	arr.	13.50	09.55	,,
,,	dep.	06.30	02 35	Tue.
Lingeh	arr.	08 50	04.55	,,
,,	dep.	09.35	05.40	,,
Bushire	arr.	12.50	09.30	,,
,,	dep.	13.35	10.15	,,
Basra	arr.	15.55	12.55	,,
,,	dep.	05.00	02.00	Wed.
Baghdad (West)	arr.	08.30	05.30	,,
,,	dep.	09.15	06.15	,,
Rutbah	arr.	12.00	09.00	,,
,,	dep.	12.45	09.45	,,
Gaza	arr.	16.45	14.45	,,
,,	dep.	07.00	05.00	Thur.
Alexandria (Aboukir)	arr.	10.25	08.25	,,
Alexandria (Harbour)	dep.	11.55	09.55	,,
Tobruk	arr.	15.10	14.10	,,
,,	dep.	06.20	05.30	Fri.
Navarino	arr.	11.45	09.45	,,
,,	dep.	12.45	10.45	,,
Syracuse	arr.	16.00	15.00	,,
,,	dep.	07.00	06.00	Sat.
Rome (Ostia)	arr.	11.25	10.25	,,
,,	dep.	12.25	11.25	,,
Genoa	arr.	15.25	14.25	,,
§ ,,	dep.	10.05	17.00	,,
§ Basle (Central Station).	arr.	06.16	05.16	Sun.
Basle (Birsfelden)	dep.	09.15	08.15	,,
Paris (Le Bourget)	arr.	12.30	11.30	,,
Paris (Le Bourget)	dep.	13.15	12.15	,,
Croydon Aerodrome	arr.	15.45	14.45	,,
London (Airways House)	arr.	16.30	15.30	,,

§ The section between Basle (Central Station) and Genoa is covered by rail (Swiss Federal Railways and Italian State Railways).

* Gmt. is Greenwich Mean Time, which is kept by the clocks on the Aeroplanes. The Time occupied by a flight is the difference between times of departure and arrival shown in this column.

† Lst. is Local Standard Time at the Port and it varies with the Geographical Position.

The Indian Stores Department.

The Indian Stores Department was instituted on 1st January 1922, after a specially appointed officer had during the preceding year investigated its possible sphere of work. The Government of India nearly half a century previously enunciated the policy of purchasing for State use stores of indigenous origin or manufacture rather than stores produced or manufactured abroad and for many years before the creation of the new department the rules governing stores purchase for public departments prescribed that subject to certain conditions as to quality and so forth preference should be given to articles manufactured wholly or in part in India. Revisions of these rules to make them better serve the purpose for which they were drafted were from time to time made but as Indian industrial development progressed and as Indian nationalism increased complaints that the policy presumed to be embodied in the rules was not in effect carried out grew in volume. The Indian Industrial Commission found that the industrial resources of the country were far from sufficiently utilised by Government Departments but that the reason was not due to restrictions in the stores purchase rules but to the failure of the Departments fully to avail themselves of the scope which the rules offered. They attributed this to lack of information as to sources and market values of Indian supplies and to the absence of inspecting agencies and they concluded that a central expert agency for the purchase and inspection of stores required for public purposes should be established. The Stores Purchase Committee which the Government of India appointed to advise them on this question unanimously supported the same conclusion and Government with the approval of the Secretary of State accepted the principles of the recommendation. The Indian Stores Department was thereupon instituted.

It was designed primarily to deal with the requirements of the Central purchasing departments and with those of the minor administrations directly controlled by the Government of India, it being impossible under the Reforms Constitution for the Government of India to compel the Provincial Governments similarly to utilise its services. The Central Government at the same time invited use of its services by Provincial Governments, Municipalities, Port authorities, company managed railways and other public or semi-public bodies.

Organisation.—The preliminary organisation of the Stores Department constituted on 1st January 1922 included as gazetted staff—

A Chief Controller of Stores.

A Director of Inspection.

A Director of Purchase and Intelligence.

A Director of Textiles Purchase.

An Assistant Chief Controller.

The designation of the Director of Textiles Purchase was early changed to Deputy Director of Purchase (Textiles) and within the first year an Assistant Controller of Textiles Purchase was appointed. The Department's growth has thus from its beginning constantly broadened and accelerated. The preliminary organisation was instituted temporarily but the department and its organisation were before the end of 1922 put on a permanent basis. The offices of Superintendent of Local Manufactures and Government Test House at Alipur and of the Metallurgical Inspector at Jamshedpur, hitherto under the direct administration of the Industries and Labour Department, were in July 1922 absorbed in the new organisation.

The number of gazetted officers in the department by the end of 1927-28 was 32 Europeans and 30 Indians.

The Functions of the new Department were early indicated as being—

(*a*) To act, subject to certain limitations, as a purchasing and inspection agency and in an advisory capacity on all matters connected with the purchase of stores in their widest sense for the public service on behalf of all Central Departments of Government and of the minor Local Governments and also on behalf of such major Local Governments, company worked railways, Corporations, Port Trusts, Municipalities and similar quasi-public bodies and Indian States as may desire to avail themselves of its assistance;

(*b*) To scrutinise the Home indents of all Central Departments, minor Local Governments and such other authorities as utilise its services with a view to ensure attention to the encouragement of Indian industries, so conducting its operations in this respect as to prevent the purchase of articles of non-Indian manufacture when goods of indigenous production of suitable quality and price are obtainable;

(*c*) To purchase and inspect in India for central departments and other buyers on the lines above indicated certain specified commodities;

(*d*) To inspect stores purchased otherwise than through the agency of the department;

(*e*) To draw up for the approval of departments and others which effect their purchases through the department specifications of the various classes of stores in demand and if so desired to advise and assist departments and others which make their own purchases in the preparation of specifications and the standardisation of patterns;

(*f*) To act as a central bureau of information on all matters affecting the purchase of stores and their prices, particularly with reference to the extent of Indian manufactures and their capacity from time to time.

In order to secure the benefit of the accumulated experience of over sixty years of purchase and inspection work in the foremost markets of the world which had been acquired by the India Store Department in London, advantage was taken of the presence of the Director of Purchase and Intelligence on leave in England to depute him to examine the system in force in the London organisation with a view to the embodiment of what was useful to the Indian Stores Department in its organisation and methods. It was at the outset decided that the Department should be quasi-commercial and self-supporting, charging a small percentage

upon the cost of its purchases and other minimum fees in other branches of activity to defray its establishment and other costs.

Past Year's Work.—The latest statistics of the work and progress of the Department are contained in its recently issued report for the official year 1927-28. They show that the total value of purchases for Government Departments by the Stores Department in that year was Rs. 3,73,03,846 against Rs. 3,98,82,245 in the preceding year. The drop occurred under the heading 'textiles' and was due partly to wider competitionand lower prices and partly to a change in Army Department purchasing procedure, which transferred purchase operations forward to the year in which stores are taken and paid for. Preference without sacrifice of economy or efficiency is given to goods of Indian origin and manufacture and in order to assist Indian manufacturers trial orders for great coat cloth and serge drab mixture, of both of which large quantities are required for the army, were placed with Indian mills at prices higher than those at which the materials could have been obtained from abroad. "It is anticipated that Indian manufacturers will be able in due course of time to produce these materials at rates which will compare favourably with those quoted by their foreign competitors and that it will be possible to obtain from Indian sources the full quantity of these materials required for the army in India."

The value of engineering and allied stores purchased through the Department in 1927-28 was Rs. 2,54,21,933, as against Rs. 2,35,95,952 in 1926-27. Approximately half were "engineering" stores, such as electrical generating plant, excavating machinery, workshop machinery, steel structures, cranes, sluice and regulator gates, steel barges, pipes, steel tanks, road rollers, electric motors, fans, cables, lamps, meters and other accessories. "Wherever possible, notably in respect of cement, oils, paints and steel work, stores of Indian manufacture and origin (wholly or partly) were obtained, but in the case of other engineering plant and machinery the bulk of the expenditure was necessarily incurred on the products of foreign countries." The central Departments, in particular the ArmyDepartment, contributed most largely to the increase in the volume of these transactions, the purchases in their behalf having risen by 47 per cent. compared with the preceding year. The Provincial Governments, railway administrations, Indian States and various public bodies mainly contributed the remainder.

The potentialities of Indian sources of supply are constantly explored and the investigation resulted in 1927-28 in the addition of 326 firms to the Department's list of approved contractors and to the lists of firms for the supply of articles for the public service. Applications for registration from 76 firms were rejected on the ground that the firms were unsuitable and 106 firms were removed from the list as being no longer useful. The Department continually endeavours to assist manufacturers to improve the quality of the products, so as to bring them up to standard, and great progress has been made in this respect, particularly in respect of textiles.

Investigations are continually made by the Department into the potentialities of Indian sources of supply. The list of approved contractors was in 1926-27 increased by 278 and application for registration from 109 other firms were rejected. During the same year 1928 indents on the India Stores Department, London, of an estimated value of Rs. 8,81,53,278, were received for scrutiny. The growth of the revenue of the Department has recently exceeded that of its expenditure and as a result there was in 1926-27 a marked decrease in the net deficit on revenue account, which in 1926-27 stood at about Rs. 29,500 as compared with about Rs. 2-15 lakhs in the last preceding year. The expenditure included in this calculation does not include pensions and contributions to provident fund, rents of Government buildings, cost of printing and stationery and certain other indirect charges and it is therefore calculated that considerable increase in the volume of business done must take place before the Department can be self-supporting in the true sense of the term.

Bombay Stamp Duties.

	Rs.	a.
Acknowledgment of Debt ex. Rs. 20 ..	0	1
Affidavit or Declaration	2	0
Agreement or Memo. of Agreement—		
(a) If relating to the sale of a bill of exchange	0	4
(b) If relating to sale of a Government security, or share in an incorporated company or other body corporate—Subject to a maximum of Rs. 20, a. 2 for every Rs. 10,000 or part.		
(c) If not otherwise provided for ..	1	0
Appointment in execution of a power—		
(a) Of trustees	15	0
(b) Of property, moveable or immoveable	30	0
Articles of Association of Company—		
(a) Where the company has no share capital or the nominal share capital does not exceed Rs. 2,500 ..	25	0
(b) Where the nominal share capital exceeds Rs. 2,500 but does not exceed Rs. 1,00,000	50	0
(c) Where the nominal share capital exceeds Rs. 1,00,000	100	0
Articles of Clerkship	250	0

	Rs.	a.
Award, any decision in writing by an Arbitrator, other than by an Order of the Court. The same duty as a Bond for the amount or value of the property to which the award relates as set forth in such award subject to a maximum	20	0
Bill of Exchange payable on demand..	0	1

Where payable otherwise than on demand but not more than one year after date or sight (if drawn singly)—Not exc. Rs. 200, a. 3; exc. Rs. 200, not exc. Rs. 400, a. 6; exc. Rs. 400, not exc. Rs. 600, a. 9; exc. Rs 600, not exc. Rs. 800, a. 12; exc. Rs. 800, not exc. Rs. 1,000, a. 15; exc. Rs. 1,000, not exc. Rs. 1,200, R. 1 a. 2; exc. Rs. 1,200, not exc. Rs. 1.600, R. 1 a. 8; exc. Rs. 1,600, not exc. Rs. 2,500, Rs. 2 a. 4; exc. Rs. 2,500, not exc. Rs. 5,000, Rs. 4 a. 8; exc. Rs. 5,000, not exc. Rs. 7,500, Rs. 6 a. 12; exc. Rs. 7,500, not exc., Rs. 10,000, Rs. 9, exc. Rs. 10,000, not exc. Rs. 15,000, Rs. 13 a. 8; exc. Rs. 15,000, not exc. Rs. 20,000, Rs. 18; exc. Rs. 20,000, not exc. Rs. 25,000, Rs. 22 a. 8; exc. Rs. 25,000; not exc. Rs. 30,000, Rs. 27; and for every add. Rs. 10,000, or part thereof, in excess of Rs. 30,000, Rs. 9.

Where payable at more than one year after date or sight, same duty as a Bond.

	Rs.	a.
Bill of Lading	0	8
Bond (not otherwise provided for)—		
Not exceeding Rs. 10	0	2
Exc. Rs. 10, but not exc. Rs. 50 ..	0	4
Exc. Rs. 50, but not exc. Rs. 100 ..	0	8
Exc. Rs. 100 & does not exc. Rs. 200	1	0
Exc. Rs. 200 & does not exc. Rs. 300	2	4
Up to Rs. 1,000, every Rs. 100 or part	0	12
For every Rs. 500 or part, beyond Rs. 1,000	3	12
Bond, Administration, Customs, Security or Mortgage Deed—For amount not exceeding Rs. 1,000, same duty as a Bond.		
In any other case..	10	0
Cancellation	5	0
Certificate or other Document relating to Shares	0	2
Charter Party	2	0
Cheque and demand drafts are exempt from stamp duty with effect from 1st July 1927.		
Composition—Deed	20	0
Conveyance, not being a Transfer—		
Not exceeding Rs. 50	0	8
Exceeding Rs. 50 not exceeding Rs. 100	1	0
Exceeding Rs. 100 but does not exceed Rs. 200	2	0
Exceeding Rs. 200 but does not exceed Rs. 300	4	8
For every Rs. 100 or part in excess of Rs. 100 up to Rs. 1,000	1	8
For every Rs. 500, or part thereof, in excess of Rs. 1,000..	7	8

Conveyance of landed property in Bombay City.—In respect of any instrument (not being a lease or transfer of a lease as defined in the Indian Stamp Act II of 1899, or an under-lease or sub-lease or an agreement to let or sub-let or a power-of-attorney) relating to immoveable property situate *within the City of Bombay*, for the entries in article 23 the following entries shall be substituted, namely :—

23. Conveyance (as defined by section 2 (10) not being a Transfer changed or exempted under No. 62—

	Rs.	a.
Where the amount or value of the consideration for such conveyances as set forth therein does not exceed Rs. 50	0	8
Where it exceeds Rs. 50 but does not exceed Rs. 100	1	0
Where it exceeds Rs. 100 but does not exceed Rs. 200	2	0
Where it exceeds Rs. 200 but does not exceed Rs. 300	8	8
Where it exceeds Rs. 300 but does not exceed Rs. 400	12	0
Where it exceeds Rs. 400 but does not exceed Rs. 500	15	8
Where it exceeds Rs. 500 but does not exceed Rs. 600	19	0
Where it exceeds Rs. 600 but does not exceed Rs. 700	22	8
Where it exceeds Rs. 700 but does not exceed Rs. 800	26	0
Where it exceeds Rs. 800 but does not exceed Rs. 900	29	8
Where it exceeds Rs. 900 but does not exceed Rs. 1,000	33	0
And for every Rs. 500 or part thereof in excess of Rs. 1,000	17	8
Copy or Extract—If the original was not chargeable with duty, or if duty with which it was chargeable does not exceed 1 Rupee..	1	0
In any other case	2	0
Counterpart or Duplicate—If the duty with which the original instrument is chargeable does not exceed one rupee—The same duty as is payable on the original. In any other case	2	0
Delivery Order	0	1
Entry in any High Court of an Advocate or Vakil	500	0
In the case of an Attorney	500	0
Instrument—Apprenticeship	10	0
Divorce	2	0
Other than Will, recording an adoption or conferring or purporting to confer Authority to adopt	20	0

Lease—Where rent is fixed and no premium is paid for less than 1 year, same duty as Bond for whole amount; not more than 3 years, same as Bond for average annual rent reserved; over 3 years, same as Conveyance for consideration equal to amount or value of the average annual rent reserved; for indefinite term, same as Conveyance for a consideration equal to the amount or value of the average annual rent which would be paid or delivered for the first ten years if the lease continued so long; in perpetuity, same as Conveyance for consideration equal to one-fifth of rents paid in respect of first 50 years. Where there is premium and no rent, same as Conveyance for amount of premium; premium with rent, same as Conveyance or amount of premium in addition to the duty which would have been payable on the lease if no fine or premium or advance had been paid or delivered.

	Rs.	a.
Letter—Allotment of Shares	0	2
Credit	0	2
License	10	0
Memo. of Association of Company—If accompanied by Articles of Association	30	0
If not so accompanied	80	0
Notarial Act	2	0
Note or Memo. intimating the purchase or sale—		
(*a*) Of any Goods exceeding in value Rs. 20	0	4
(*b*) Of any Stock or marketable Security exceeding in value Rs. 20—Subject to a maximum of Rs. 20, a. 2 for every Rs. 10,000, or part.		
Note of Protest by a Ship's Master ..	1	0
Partnership—Where the capital does not exceed Rs. 500	5	0
In any other case	20	0
Dissolution of	10	0
Policy of Insurance—		
(1) *Sea*—Where premium does not exceed rate of 2a., or ⅛ per cent. of amount insured	0	1
In any other case for Rs. 1,000 or part thereof	0	2
(2) *For time*—For every Rs. 1,000 or part insured, not exc. 6 months ..	0	2
Exceeding 6 and not exceeding 12 months	0	4
If drawn in duplicate, for each part.—Half the above rates, for Sea and Time.		
(3) *Fire*—When the sum insured does not exceed Rs. 5,000..	0	8
In any other case	1	0

In respect of each receipt for any payment of a premium on any renewal of an original policy—One half of the duty payable in respect of the original policy in addition to the amount, if any chargeable under Art. 53 (*Receipt*).

	Rs.	a
(4) *Accident and Sickness*—Against Railway accident, valid for a single journey only	0	1
In any other case—for the maximum amount which may become payable in the case of any single accident or sickness where such amount does not exceed Rs. 1,000, and also where amount exc. Rs. 1,000, for every Rs. 1,000 or part	0	2
(5) *Life, or other Insurance, not specifically provided for*—		
For every sum insured not exceeding Rs. 1,000 and also for every Rs. 1,000 or part	0	6
If drawn in duplicate, for each part	0	3
Insurance by way of indeminty against liability to pay damages on account of accidents to workmen employed by or under the insurer or against liability to pay compensation under the Workmen's Compensation Act of 1923. For every Rs. 100 or part payable as premium ..	0	1
In case of a re-insurance by one Company with another—¼ of duty payable in respect of the original insurance, but not less than 1 anna, or more than 1 Re.		
Policies of all classes of Insurance not included in Article 47 of Schedule 1 of Stamp Act of 1899 covering goods, merchandise, personal effects, crops and other property against loss or damage, are liable to the same duty as Policies of Fire Insurance.		
Power of Attorney—		
For the sole purpose of procuring the registration of one or more documents in relation to a single transaction or for admitting execution of one or more such documents	1	0
When required in suits or proceedings under the Presidency Small Causes Courts Act, 1882	1	0
Authorising 1 person or more to act in a single transaction other than that mentioned above	2	0
Authorising not more than 5 persons to act jointly and severally in more than 1 transaction, or generally ..	10	0
Authorising more than 5 but not more than 10 persons to act	20	0
When given for consideration and authorising the Attorney to sell any immovable property—The same duty as a *Conveyance* for the amount of the consideration.		
In any other case, for each person authorised	2	0
Promissory Notes—		
(*a*) When payable on demand—		
(i) When the amount or value does not exceed Rs. 250	0	1
(ii) When the amount or value exceeds Rs. 250 but does not exceed Rs. 1,000	0	2

	Rs.	a.
(iii) In any other case	0	4
(b) When payable otherwise than on demand—The same duty as a Bill of exchange for the same amount payable otherwise than on demand.		
Protest of Bill or Note	2	0
Protest by the Master of a Ship	2	0
Proxy	0	2
Receipt for value exc. Rs. 20	0	1
Reconveyance of mortgaged property— (a) If the consideration for which the property was mortgaged does not exceed Rs. 1,000—the same duty as a bond for the amount of such consideration as set forth in the Reconveyance.		
(b) In any other case	10	0
Release—that is to say, any instrument whereby a person renounces a claim upon another person or against any specified property— (a) If the amount or value of the claim does not exceed Rs. 1,000—The same duty as a Bond for such amount or value as set forth in the Release.		
(b) In any other case	10	0
Respondentia Bond—The same duty as a Bond for the amount of the loan secured.		
Security Bond—(a) When the amount secured does not exceed Rs. 1,000—The same duty as a Bond for the amount secured.		
(b) In any other case	10	0
Settlement—The same duty as a Bond for the sum equal to the amount or value of the property—settled as set forth in such settlement.		
Revocation of Settlement.—The same duty as a Bond for a sum equal to the amount or value of the property concerned as set forth in the instrument of revocation but not exceeding ten rupees.		
Share-warrant to bearer issued under the Indian Companies Act.—One and a half times the duty payable on a conveyance for a consideration equal to the nominal amount of the shares specified in the warrant.		
Shipping Order	0	1
Surrender of Lease—When duty with which lease is chargeable does not exceed Rs. 5—The duty with which such Lease is chargeable.		
In any other case	5	0
Transfers of Shares—One-half of the duty payable on a Conveyance for a consideration equal to the value of the share.		
Transfer of any Interest secured by a Bond, Mortgage-deed, or Policy of Insurance—If duty on such does not exceed Rs. 5—The duty with which such Bond, &c., is chargeable.		
In any other case	10	0
—of any property under the Administrator General's Act 1874, Section 31..	10	0
—of any trust property without consideration from one trustee to another trustee or from a trustee to a beneficiary—Five rupees or such smaller amount as may be chargeable for transfer of shares.		
Transfer of Lease by way of assignment and not by way of under-lease—The same duty as a conveyance for a consideration equal to the amount of the consideration for the transfer.		
Trust, Declaration of—Same duty as a Bond for a sum equal to the amount or value of the property concerned, but not exceeding	15	0
Revocation of—Ditto, but not exceeding	10	0
Warrant for Goods	0	8

PROVING OF WILLS.

In British India if a person has been appointed executor of the will of a deceased person, it is always advisable to prove the will as early as possible. If the will is in a vernacular it has to be officially translated into English. A petition is then prepared praying for the grant of probate of the will. All the property left by the deceased has to be disclosed in a schedule to be annexed to the petition. The values of immoveable properties are usually assessed at 16⅔ years purchase on the nett Municipal assessment. For estate under Rs. 10,000 the probate duty payable is 2%; between Rs 10,000 and Rs. 50,000 the duty payable is 2½%. Over 50,000 rupees the duty payable is 3%. In determining the amount of the value of the estate for the purposes of probate duty the following items are allowed to be deducted:—

1. Debts left by the deceased including mortgage encumbrances.
2. The amount of funeral expenses.
3. Property held by the deceased in trust and not beneficially or with general power to confer a beneficial interest.

The particulars of all these items have to be stated in a separate schedule. It is the practice of the High Court to send a copy of these schedules to the Revenue authorities and if the properties particularly immoveable properties have not been properly valued, the Revenue department require the petition to be amended accordingly. In certain cases the Court then requires citations to be published and served on such persons as the Court thinks are interested in the question of the grant of probate. If no-objection is lodged by any person so interested within 14 days after the publication or service of citation and if the will is shown to have been properly executed and the petitioner entitled to probate, probate is ordered to be granted.

The Indian National Congress.

For a complete history of the movement represented by the Indian National Congress the reader is referred to earlier editions of the Indian Year Book. The Congress was founded in 1885 by Mr. Allan Octavian Hume, a retired member of the Indian Civil Service, and it held its first session in Bombay at Christmas of that year, the fundamental principles of the Congress were laid down to be:—

> Firstly, the fusion into one national whole of all the different and discordant elements that constitute the population of India;
>
> Secondly, the gradual regeneration, along all lines, mental, moral, social and political of the nation thus evolved; and
>
> Thirdly, the consolidation of union between England and India by securing the modification of such of the conditions as may be unjust or injurious to the latter country.

With these objects in view the Congress pursued an uneventful career until 1907. It undoubtedly exercised a great influence in inducing a spirit of national unity amongst the diverse peoples of India, in focussing the chief political grievances, and in providing a training ground for Indian politicians. But in 1907 the Extremists, chiefly of the Deccan and the Central Provinces, who had for some time chafed under the control of the older generation, succeeded in wrecking the Surat session of the Congress and produced a split which had long been seen to be imminent. The senior members of the Congress therefore re-crystallised its creed in definite terms. They laid down that—

"The objects of the Indian National Congress are the attainment by the people of India of a system of Government similar to that enjoyed by the self-governing members of the British Empire, and a participation by them in the rights and responsibilities of the Empire on equal terms with those members. These objects are to be achieved by constitutional means by bringing about a steady reform of the existing system of administration and by promoting national unity, fostering public spirit and developing and organising the intellectual, moral, economic and industrial resources of the country."

For some years following 1907 efforts were made to heal the split and these were without avail until 1916 when a re-united Congress met at Lucknow under the presidency of Babu Ambica Charan Muzumdar of Faridpur in Bengal. But the union then effected was purely superficial; the difference between the Moderates and the Extremists was fundamental; the Extremists captured the machinery of the Congress and from the period of the special session held at Calcutta in September 1920 the Congress passed entirely under the domination of Mr. Gandhi and his lieutenants. In 1927 the Congress actually adopted independence as the goal of India. This resolution was, however, slightly modified next year when it was declared that, while the Congress adhered to the independence resolution, Dominion Status, it was stated, would be acceptable if it were granted before the end of 1929.

THE NON-CO-OPERATION MOVEMENT.

It was in 1920 that Mr. Gandhi, who had only in the previous year unsuccessfully started his Passive Resistance struggle as a protest against the Rowlatt Act, conceived his idea of non-co-operation. Originally intended to be a protest against the British policy towards Turkey, the "fighting" of two other grievances was later on added to its first object, namely, the punishment of officials in the Punjab Martial Law regime and the securing of Swaraj for India. Mr. Gandhi and Mr. Shaukat Ali were able in 1920 to get the Calcutta Special Congress to endorse their programme of "progressive non-violent non-co-operation" which was reiterated by the annual session at Nagpur, which, on Mr. Gandhi's motion, changed its old creed into "the attainment by India of Swaraj by all legitimate and peaceful means." The stern measures adopted by local Governments led to the imprisonment of a large number of active Congressmen with the result that the Ahmedabad Congress in 1921 made a "grim resolve" to challenge the "repression movement" by appointing Mr. Gandhi as dictator and by resolving to start a "No Tax" campaign at Bardoli. The riots in Chauri Chaura in 1922, preceded by the Bombay riots in 1921 during the Prince of Wales' visit (see 1923 and 1924 editions of this book) opened Mr. Gandhi's eyes to the impossibility of maintaining a non-violent atmosphere under exciting conditions. He suspended his proposed civil disobedience campaign, and replaced it by what is known as the Bardoli Programme which suspended all the aggressive items of non-co-operation in favour of the promotion of inter-communal unity and khaddar. Soon after, Mr. Gandhi was arrested for sedition, tried and sentenced to undergo imprisonment for six years. (See 1923 and 1924 editions.)

This turn of events threw cold water on the enthusiasm of non-co-operators who got discouraged. In order, therefore, to sound the country's readiness for aggressive action once more, the All-India Congress Committee appointed a Committee, known as the Civil Disobedience Committee, in June 1922. The Committee toured the country and in October, 1922, produced two reports, one favouring Council entry to offer obstruction to Government and the other recommending the adoption of the Bardoli programme. A battle royal ensued between the two parties at the Gaya Congress. The anti-Council Party won the day, and the Councilites, led by the Congress President, Mr. C. R. Das, formed the Swarajya Party in order to push their own Council programme. The Swarajya Party by its continuous propaganda gained considerable support in the country. The No-Change Party seeing the trend of public

opinion got the Congress to lift the ban on Council entry. The Swarajists secured a large number of seats in various provincial Councils and in the Assembly. The annual Congress at Cocanada, under the presidentship of Mr. Mahomed Ali, put an end, at any rate for some time, to the Council entry controversy.

The Congress had an eventful career in 1924. Mr. Gandhi, who had an attack of appendicitis of a serious form in the Yerowda Jail, was released by the Government of Bombay. Immediately, the No-Changers revived their hopes of fighting the Swarajists to a finish. After nearly six weeks' discussion, in May, 1924, Mr. Gandhi definitely dissociated himself from the Council Programme and the Swarajist obstructive policy; while the Swarajist leaders in a separate statement defended their policy. Public controversy again centred round the Council question. In the meanwhile, the Government of Bengal with the sanction of the Governor-General promulgated an Ordinance in order to check the forces of the growing revolutionary movement in Bengal. Under this Ordinance and under Regulation III of 1818 they effected several arrests including a few Swarajists. Mr. Gandhi went to Calcutta and, after a series of consultations with the Swarajist leaders, drew up what is now known as the Gandhi-Swarajist Pact by which Mr. Gandhi agreed to suspend the non-co-operation movement and to recognise the Swarajists as the accredited representatives of the Congress on legislative bodies, while in return the Swarajists agreed to his spinning franchise which laid down 2,000 yards of hand-spun yarn every month as the subscription to Congress membership instead of the four annas a year as decided by the Nagpur Congress.

The Congress which met at Belgaum during Christmas week under Mr. Gandhi's presidency endorsed the Bengal Pact. Among the other resolutions passed by the Congress was one suspending the non-co-operation programme. Non-co-operation was thus practically dead, and, strange to say, it received its death-blow at the hands of the very author of its being. But the fond parent did not lose heart and bided his time. His chance came in 1928 when the Congress was split into two warring camps. One was ready to accept Dominion status for India, while the other would have nothing short of independence. At the psychological moment, Mr. Gandhi staged a re-entry into the political arena—he had been but a silent spectator during the five preceding years—and, professing to effect a compromise within the Congress, provided a loophole for the revival of non-co-operation. Although he made it conditional on the refusal to concede Dominion status within a year, he must have been sure—as everyone is sure that Dominion status cannot and will not be granted in the short space of a year—that the condition is only a farce and that he will have certain chance of again bolstering up his pet formula.

Congress in 1925-27.

The policy of the Congress executive during the first half of 1925 was one of aimless drift. The death of Mr. C. R. Das demoralised the Swarajists. Mr. Gandhi promptly went to their rescue and at the end of the year the Swarajists' political programme was formally adopted by the Cawnpore Congress. Of a more far-reaching character was the split that occurred in the ranks of the Swarajists themselves at Cawnpore. Messrs. Jayakar and Kelkar from Bombay and Dr. Moonje from the C. P. registered their emphatic protest and resigned their seats on the Legislatures professing thereby to liberate themselves from the Swarajist obligations and desiring to be free to propagate their own cult of Responsive Co-operation and acceptance of office.

The Responsive Co-operators, who had in the meanwhile strengthened their position and secured appreciable support to their creed of co-operation when possible and opposition when necessary, led the country's attack on the Swarajists.

The 41st session of the Congress, which met in Assam during Christmas week in 1926, set its face against the acceptance of ministerships or other offices in the gift of the Government and approved of the policy of rejection of budget and refusal of supplies until a response to the "national demand" was forthcoming.

The Congress activities in 1927 bore distinct traces of the character of the President, Mr. S. Srinivasa Iyengar—in particular, his inordinate ambition to glorify his presidency by the achievement at any price of communal and political unity and his general weakness resulting from a desire to placate opponents, humour friends and please all. It was an impossible task and impossible it proved to be. The decision of the Gauhati Congress against the acceptances by Congressmen of ministerships definitely alienated the Responsivists. The Liberals were claiming the Responsivists who were still in the Congress but not of it. While the political influence of the Congress in the country was confined to the handful of Swarajists with their dull and destructive tactics, the communal tension was worsening day by day leading to alarmingly frequent outbreaks of riots and minor disturbances. Every Hindu procession particularly in Northern India, and every Mahomedan festival became a "head-line event" and it was with much relief that one read ".......passed off quietly." This communal antagonism was doubtless a disquieting feature of the country's advance and the leaders were not blind to it. But frantic efforts were productive of no more than pious paper resolutions which were broken before the ink had dried.

The first move of importance in the direction of communal unity was what were known as the Delhi proposals, which a body of leading Mussulamans gathered at Delhi offered at the instance of Mr. Jinnah to the Hindu community. Although a minority community, the Mahomedans, according to the Delhi proposals, agreed to joint electorates with reservation of seats, provided Sind was constituted a separate province and Reforms were introduced in the N. W. F. Provinces and Baluchistan. The proposals met with mixed reception.

The proposals were, however, formally accepted by the All-India Congress Committee which met in Bombay, not without mental reservations on the part, perhaps, of every one concerned. More contentious than this was the issue of

political unity which Mr. Iyengar had set himself to establish.

In the latter half of the year the Congress Working Committee so modified the Assam Congress resolution that not only did uniform opposition to the ministry cease to be Congressmen's duty but the question whether Congressmen should support or oppose the ministry was also left to be decided by the Congress parties in the Legislatures concerned. This was too much for the die-hards who requisitioned a special meeting of the All-India Congress Committee, but did not press the issue for which the meeting was called. The meeting, however, was rendered lively by the feeling that was generated by the consideration of the conclusions arrived at by the Unity Conference held at the same place earlier. There was a bitter debate marked by a walk-out, several amendments and numerous points of order. Ultimately the resolutions were ratified and the "era of communal peace" hailed—but almost simultaneously riots broke out at Gaya! As a result, conversions and reconversions were to be allowed and so were music before mosques and cow sacrifice—subject, of course, to conditions

All this talk and quarrel about the internal affairs of the Congress were set at rest by the non-inclusion of Indians on the personnel of the **Royal Commission on Indian Reforms.** Most of the leaders fancied that it would be an insult to India if Indians were not appointed members of the Commission. Even moderates reputed for their sobriety and reasonableness affected extremism. The Viceroy endeavoured —but in vain—to explain the position to the leaders of the land (See Year Book of 1928).

Congressmen were firm. With boycott of the Commission, communal unity and constitution making as their war-cry, Congressmen met at Madras during Christmas under the presidency of Dr. M. A. Ansari.

On the communal question the Congress adopted a resolution which stipulated the introduction of joint electorates with reservation of seats, the constitution of Sind, Karnatak, Andhra and Utkal as separate provinces and the introduction of Reforms in the N. W. F. Provinces. On the question of music outside mosques and cow slaughter each community was asked to respect the other's feelings without prejudice to the rights of the respective communities. Of course the Congress decided on a thorough boycott of the Commission including hartals and mass demonstrations. As expected, the Working Committee was asked to draft a Swaraj constitution in consultation with other bodies and to place it before a National Convention to be convened at Delhi not later than March 1928. By far the most spectacular of the resolutions was that which declared the goal of the Indian people to be complete national independence which was carried after considerable opposition.

Congress in 1928.

The activities of the Congress in 1928 constitute an epoch. It was in that year that for the first time the politicians of the country co-operated, under the aegis of the Congress, to produce a draft constitution for the future governance of the land. It was also in that year that the Congress gave birth to an institution which threatened, and is still threatening, to eclipse the parent body. Again it was in 1928 that the Congress adopted in its open session at Calcutta a resolution declaring specifically, though conditionally, that Dominion status would be acceptable to India. This, it will be recalled, marks a return to 1908 when, soon after the Surat split, it was stated that the objects of the Congress were, among other things, "the attainment by the people of India of a system of Government similar to that enjoyed by the self-governing members of the British Empire." Since this declaration of faith over a score of years ago the Congress has been drifting farther and farther from practical politics : it adopted complete non-co-operation; then practised a restricted form of that negative doctrine ; discarded it altogether ; resolved to boycott the Parliamentary Commission ; and lastly, in 1927, set independence as the goal of India. From this there was a reaction which found expression in the Calcutta resolution.

Early in the year Sir John Simon and his colleagues on the Indian Statutory Commission landed in India to carry out a preliminary survey of their field of inquiry In pursuance of the resolutions adopted by the premier political institutions of the country hostile demonstrations were organised at the various places visited by the Commissioners. The demonstrators, however, were mostly students led by professional politicians whose efforts did not prevent welcome addresses being presented to the distinguished visitors in the name of the masses—the Muslims, the "untouchables", the labouring classes and the agriculturists. Thus, in spite of the "boycott," the Commission had a triumphant tour through the country in the earlier half of the year when the Parliamentarians studied the life, the people, their manners and customs, their needs and desires.

The boycotters strove hard to reduce the work of the Commission to a farce, if not to make it impossible altogether, and towards this end sought to wreck the machinery by means of which the inquiry was intended to be conducted. Congressmen and their allies in the various provincial Legislative Councils tried their best to get the Council to refuse to co-operate in the inquiry ; but the majority in every province—except the Central Provinces—was for co-operation. Committees were set up by everyone of these Councils to sit with the Commission as it toured each province, taking official and non-official evidence. The Central Legislature, unfortunately, struck a discordant note. The Lower House resolved to non-co-operate. The elders chose their representatives and the only way to secure representation for the popular chamber was for the Viceroy to nominate representative members to constitute, in conjuction with those of the Council of State, the Central Legislative Committee to work in collaboration with the Simon Commission in the statutory inquiry.

The failure of the boycott reminded Congressmen of the next duty which the Madras session had imposed on them, namely, the drafting of a "Swaraj" constitution for India. This they set out to do about the middle of the year when

representatives of almost all political organisations met in Bombay at the invitation of the Congress executive. Dr. M. A. Ansari, the Congress President, presided on the occasion and declared the readiness of Congressmen to co-operate with others in drafting a constitution "as a reply to Lord Birkenhead's challenge". The All Parties Conference—for that it was in a real sense—appointed a representative committee to undertake the task. The Committee was presided over by Pandit Motilal Nehru, the veteran Congressman and Swarajist, and included Sir Tej Bahadur, the Liberal leader, and Sir Ali Imam.

The Committee consulted various leaders in the country and after two or three months' hard labour produced a document, which, however, instead of being an all parties' report, evoked more controversy than any other proposal in recent years regarding the future of India. In the words of the report itself: "There were two formidable difficulties in the way of complete or even substantial unanimity. The first arose from the difference in the general outlook of the Congress and that of the other organisations, the former having at its last (Madras) session adopted a resolution declaring independence as its goal and the latter aiming at Dominion status; the second arose from the widely differing angles of vision from which the various communal organisations viewed their political rights." These words hold good even now.

The Committee declared there was no half-way house between the present hybrid system and reponsible government (which it held to be identical with Dominion status) and demanded its immediate introduction following the abolition of the India Office and the transference of power from the British to the Indian voter. The question of defence, communal dissensions in the country, the special social conditions of India and the position created by the existence of Indian States were all dismissed by the Committee as comparatively unimportant considerations. The control of the army was to be transferred to the responsible Indian Government. The communal problem could be settled by the abolition of separate electorates and the introduction, if necessary, of reservation of seats for majorities as well as minorities in the legislatures of the land only for a period of ten years. In regard to the Indian States, the Committee provided that all treaties made between the East India Company and the Indian States and all such subsequent treaties, so far as they would be in force at the commencement of the "Commonwealth of India Act" should be binding on the "Commonwealth"; the "Commonwealth" should exercise the same rights in relation to, and discharge the same obligations towards, the Indian States as the Government of India exercised and discharged previous to the passing of "this Act". In cases of disputes between the "Commonwealth" and Indian States, the matter should be referred to a Supreme Court to be constituted.

The question of Indian States, it may be mentioned in passing, came into prominence as the result of the inquiry conducted by the Committee set up by the Government of India under the Chairmanship of Sir Harcourt Butler in regard to the relations of the States and their rulers with the Government of India. The recommendations of the Nehru Committee in this behalf served to give a foretaste of what the plenary session of the Congress did later, namely, to lift the ban placed on the Congress on interference in the affairs of Indian States and their people. Following this vital change in creed—which gave official Congress approval to what in many cases was mischievous propaganda carried on in Indian States by British Indian politicians the Congress demanded the introduction of responsible government in Indian States.

To return to the Nerhu Report. Apart from the opposition of Sikhs and Muslims, a large section of Congressmen themselves expressed dissatisfaction at the moderate tone of the report which recommended the acceptance of Dominion status in substitution of independence which the Madras Congress had set as the goal of Congressmen. Many Congressmen declared that, in spite of the protests to the contrary of the authors of the report, it was intended for the Commission with which they were professing to non-co-operate. The principal objection came from Madras. Messrs. Srinivasa Iyengar, ex-President, Subhas Chandra Bose, ex-detenu, and Pandit Jawaharlal Nehru were the leaders of this movement against the Nehru Report on the ground that it went back on the Madras Congress resolution.

Meanwhile, the Commission, which had gone to England after its preliminary tour, returned and commenced regular inquiry in October. Even the little boycott that prevailed earlier in the year disappeared and the inquiry went on smoothly, except for slight disturbances at Lahore and in the U.P. At the former place the mob broke down a fence erected by the police and threatened to overwhelm the latter who charged the crowd. In the scuffle some of the leaders, including Lala Lajpat Rai, M.L.A., ex-Prsesident of the Congress, was assaulted. The Lala died subsequently of heart failure, but Congressmen were not slow to make political capital out of his death and affirmed that he succumbed to the injuries inflicted on him by the police.

As the year drew to a close and the annual session of the Congress approached, a fierce controversy raged over the Nehru Report. The advocates of complete independence and true Muslim leaders, who were alarmed at the light-heartedness with which the report had dismissed their community's interests, were the loudest in declaiming it. It was in this atmosphere that the All Parties' Convention met at Calcutta, a few days prior to the annual meeting of most of the political organisations in India, for the purpose of receiving and considering the All Parties' Committee's report. The Convention adopted the proposal that India should have the same constitutional status in the community of nations known as the British Empire as the Dominions of Canada, the Commonwealth of Australia, the Dominion of New Zealand, the Union of South Africa and the Irish Free State, with a Parliament having powers to make laws for peace, order and government of India and an executive responsible to that Parliament. Prohibition was included in the articles of the constitution; and the proposal of the Nehru Committee safeguarding the liberties of all persons

and guaranteeing all personal and private properties in the future commonwealth was carried after a heated debate. The Convention agreed that the future Parliament of India should be free to retaliate if any other part of the Empire placed any disabilities on Indians. It was laid down that the grant of full responsible government in Indian States was necessary before they could be assigned a place in free federal India.

The Convention, however, failed to find a solution acceptable to all for the communal question. The matter was referred to a Committee, which, although it held an all-night sitting, failed to reach agreement, with the result that the Mahomedan spokesmen left the meeting in disgust. The question again came up before the open session of the Convention. Mr. Jinnah, on behalf of the Muslims, agreed to accept joint electorates and adult franchise, provided one-third of the number of seats in the Central Legislature was reserved for Muslims and residuary powers were vested in the Provincial Governments. The Convention refused to agree to these two demands, although on other minor points the Muslim claims were conceded. The Muslims were thus sorely disappointed. And so were the Sikhs, who, on the other hand, objected to communalism being made the basis of any future constitution and affirmed that if that were done they would withhold their support from the Nehru Report. Their spokesman made a lengthy statement and walked out of the Convention pandal as a protest.

It was resolved eventually that "except on points on which notes of dissent have been recorded at the instance of some parties present, the Nehru Report marks general agreement on the basis of a solution of the communal problems." The Convention then adjourned *sine die* "to meet when necessary to complete its work."

It was proposed at first that the Congress Working Committee should summon the Convention at a later date, but Mrs. Besant raised a significant objection. She pointed out that the Congress was only one of the parties to the Convention and that the latter was a body independent of the Congress. She had, as a matter of fact, for some time previously, been striving to make the Convention a permanent institution inasmuch as it represented the largest measure of agreement among all political parties, while the Congress was later becoming narrower and narrower. The talk of independence and the inclusion later in the main resolution of the Congress of a threat to revive non-co-operation made her firmer in her resolve to perpetuate the Convention. Indeed, Mrs. Besant, although an ex-President of the Congress, openly declared her intention to dissociate herself from Congress activities and to propagate the cult of Dominion status in the name of the All Parties' Convention.

With Mrs. Besant, the Liberals and the bulk of Muslim opinion opposed to the idea of independence and the left wing of the Congress opposed to anything less extreme than that, the position of Pandit Motilal Nehru, the President of the Congress, and others of his view of thinking was very unenviable. True, that when he was elected President Pandit Nehru, in the words of Mrs. Besant, resigned the honour and sought re-election with the Nehru Report in his hand and was again returned triumphantly. But by no means did this circumstance influence the Leftists who continued their opposition to the Dominion status ideal with renewed vigour and were determined to wreck it in the open Congress. It was no wonder, therefore, that Pandit Nehru, in his presidential address to the Congress, blew hot and cold in the same breath. He said: "I am for complete independence—as complete as it can be—but I am not against full Dominion status—as full as any Dominion possesses it to-day, provided I get it before it loses all attraction, I am for severance of British connection as it subsists with us to-day, but I am not against it as it exists with the Dominions." He held that Dominion status involved a very considerable measure of freedom bordering on complete independence which was any day preferable to complete dependence. He put to himself three questions: Where do we stand? What is our destination? How can we reach the destination? Answering the first, he declared that Indians were handicapped by two serious disabilities, one imposed by the foreign rule and the other of their own making. One making the removal of the other impossible. He pleaded for united action to get out of this vicious circle. As for the second question, he said: "Our destination is freedom, the form and extent of which will depend upon the time when, and the circumstances under which, it comes." The means of achieving this end, of course, was to adopt the Nehru scheme. He urged that religion be divorced from politics, warned the country against socialism, appealed for social reorganisation, the removal of untouchability and the elevation of women and made a fervent appeal to the Congress to open its doors wide and "admit the nation which is knocking at your door.'

The Congress was divided into three camps; the advocates of complete independence led by Mr. Iyengar (for some time), Mr. Subhas Chandra Bose and Pandit Jawaharlal Nehru, son of the President; those who wanted Dominion status and nothing beyond that, led by Mrs. Besant; and Pandit Nehru sandwiched between the two, with one foot in either camp. The "Independents" denounced the others as seeking to convert the Congress into a moderate organisation, while Mrs. Besant declared that the Leftists were heading for ruin. This was just the opportunity for which Mr. Gandhi had, apparently, been waiting, and he staged a come-back at the psychological moment. He threw in his weight with Pandit Nehru and sponsored a compromise formula which primarily served his purpose. Although the Belgaum Congress formally put an end to the non-co-operation movement and although since then Mr. Gandhi hed been staying in the political background, he had been waiting for a chance to make a re-entry into active political life and revive his pet theory of non-violent non-co-operation. The astute politician that he is, he effectively exploited this opportunity. While adhering to the goal of independence, he was prepared to accept the Nehru constitution, on condition that the Congress would be free to revive non-co-operation if Dominions status were not granted.

This satisfied neither wing. Mr. Iyengar walked out of the Working Committee of the Congress as a protest against the compromise resolution. Mr. Gandhi first proposed to fix December 31, 1930, as the time limit for the acceptance of the Nehru constitution and suggested that a copy of the resolution be forwaded to the Viceroy. To this Pandit Jawaharlal Nehru moved an amendment repudiating Dominion status and advocating severance from "British imperialism." Mr. Gandhi and Pandit Nehru threatened to leave the Congress to Mr. Iyengar and his followers if the latter persisted in their attitude, whereupon another effort was made to effect a compromise. This time a quarrel arose as to whether the Nehru Report should be "approved" or "adopted", and Mr. Gandhi declared "This diplomacy stinks in my nostrils." Although the second draft deleted the portion asking the President to forward the resolution to the Viceroy, it did not meet with all-round approval. A third resolution was then drafted reducing the time limit to one year. This Mr. Iyengar agreed to support but the other "Independencewallahs" were opposed to it. The final resolution approved of the Nehru Report as a great step in political advance and, whilst adhering to the Madras resolution on independence, the Congress was prepared, subject to the exigencies of the political situation, to adopt the Nehru constitution, if it was accepted by the British Parliament before the expiry of 1929; and if that did not happen the Congress would revive non-violent non-co-operation; Congressmen could, in the meanwhile, carry on propaganda for independence. Mr. Gandhi pointed out that Dominion status was not inconsistent with the sort of independence desired by Indians of all parties; but amendments were moved in the open Congress, one of which accepted only the political solution of the report, another only the communal solution, while a third was Communist in tone. Eventually, however, the motion was carried by majority of 1,300 to 900.

Mr. Gandhi's re-entry into politics was signalised by a resolution which asked Indians to adopt in cases of specific grievances the kind of civil disobedience and non-payment of taxes practised by the people of Bardoli taluka in Gujerat as a protest against the revised land assessment. It was also resolved to boycott foreign cloth, use khaddar, remove untouchability and carry on village reconstruction, with a view to devising sanction for enforcing the Nehru demands.

The National Liberal Federation.

The definite breach between the moderate and extremist elements in the Congress at its special session in Bombay in August 1918 (*vide* 1919 edition of this book) witnessed the birth of the National Liberal Federation which has, since then, been the platform of Indian moderate leaders. It held its first session in Bombay in 1918. Sir Surendranath Banerjee presiding. The Federation adopted for its creed the old Congress formula which was set aside by the Nagpur Congress.

Those who had held the Federation in high esteem for its moderation, sobriety and balanced judgment suffered a rude shock in 1927 when the Liberal body and its leading lights proved the saying, "If you scratch a Liberal you will find an extremist." Liberal leaders bade good-bye to their avowed principle of co-operation with the Government when they expressed themselves in favour of a boycott of the Royal Commission on Indian Reforms on the ground that there was no Indian on it.

Thenceforward Liberal politics became negative and barren, and leaders who had enjoyed a reputation for sane-thinking came to be regarded as the "wild men" of the Congress. Boycott was the breath of their nostrils, although they were declaring now and then that the door wat still open for Government to "make a gesture co-operation". Their monotonous stagnation was, however, slightly relieved by the efforts at constitution making undertaken at the instance of the Congress. Liberals heartily co-operated in this endeavour and attended the All Parties Conference summoned by the Congress in the middle of the year. Sir Tej Bahadur Sapru, President of the Liberal Federation, consented to serve on the Committee appointed by the Conference to draft a constitution for India. After months of toil the Committee produced a constitution according to which Inda would enjoy the status of the Dominions of the British Empire. The report also offered a solution for the communal dissensions and a formula to govern the relations between British India and the Indian States. It was, in a sense, a Liberal document, for the Liberals were the only group of men in the country who unanimously and unreservedly accepted the entire report, while a comparatively small, but none the less vocal, section of Congressmen and the bulk of Muslims were opposed to the main recommendations of the Committee. It was no wonder, therefore, that the Liberals who took part in the All-Parties Convention, which met at Calcutta before the Congress to consider the report, accorded their whole-hearted support to the scheme, which, with minor changes, was adopted by the Convention.

The 1928 Session.—After the main work of the Convention had been completed the Liberals held their annual meeting of the Federation at Allahabad on the last day of the year under the Presidency of Sir Chimanlal Setalvad. "I venture to think, said" Sir Chimanlal in his address to the Federation, "that every reasonable mind

should accept the goal of Dominion status. Dominion status meets all national aspirations and carries with it the protection, safety and other advantages of partnership in the most powerful Empire in the world." He pointed out the inconsistency of the Congress compromise resolution on Dominion status which contained a threat to revive non-co-operation, with a view to achieving independence,after a certain period, if Dominion status was not conceded by the British. Sir Chimanlal added that those who affirmed independence as their goal could not be honest believers in Dominion status and that those who believed in Dominion status within the Empire could not countenance such an ultimatum. He gave a list of the services done to the country by the Liberals and accused the Government of non-co-operating with them, adding that Government was responsible for creating extremism in the land by "blundering and hesitating policy." He considered that a declaration of rights and the securing of all property rights were essential in any future constitution and drew attention to the menace of communism which is threatening not only the ordered progress of the country but the very foundations of society and the State. Therefore "it behoves Government and all right-thinking men to take all measures to stop this exploitaion and misleading of the masses for revolutionary purposes, before it is too late." Sir Chimanlal advocated full provincial autonomy with the transfer of all provincial subjects (including law and order) to ministers. An element of responsibility should be introduced in the Central Government and, though this meant the introduction of dyarchy, it would work satisfactorily with goodwill.

The Federation then adopted a resolution asking for Dominion status for India immediately, as "any further delay and postponement is fraught with danger to the mutual relations of India and England." Another resolution approved of the Nehru constitution including provincial autonomy and the vesting of residuary powers with the Central Government. A committee was appointed to co-operate with any other organisation to arrive at a formula, in addition to, or in substitution of, the Nehru solution, for the settlement of communal differences. The Federation urged the introduction of Reforms in Indian States and welcomed the proposal to arrange for representatives of British India and Indian States to meet and discuss their respective points of view with a view to arriving at a settlement acceptable to both.

An insight into the real state of mind of the Liberals at present was furnished by the concluding remarks of the President of the Federation who issued a grave warning to Government. The trusteeship of England, he declared, was coming to an end. Britian had to deal with a people who had attained majority and were demanding from the so-called trustees their property and also asking for accounts. The British must change their mentality and must realise the mentality that was growing in the country, which, if not guided properly, would swallow everything. "It will swallow Dominion status and even British connection and British trade. If Government does not heed our voice and take our modest counsel into consideration, Heaven only knows what the consequences will be."

The Moslem League.

The All-India Moslem League came into being in 1906 out of the universal desire among leading Mussalmans at that time for an effective organisation to protect their communal interests. With a view to secure separate Muslim representation in the legislative bodies of the land under the Minto-Morley scheme of constitutional reforms then under discussion, Indian Moslems who had been hitherto keeping aloof from politics organised the League. Its original objects were the promotion of loyalty to British Government, the protection of political and other rights of Mussalmans and to place their needs and aspirations before Government in temperate language and to promote inter-communal unity without prejudice to the other objects of the League. Moslem opinion slowly advanced: and in 1913 the securing of self-government within the British Empire was included in the objects. The League was a powerful and influential body in 1916 and 1917, and what is known as the Lucknow pact of communal representation arrived at between the League and the Congress in 1916 was bodily incorporated in the Government of India Act, 1919. The birth of the Khilafat Committee however overshadowed the League which from 1919 had almost disappeared till April 1923 when it met for a brief period under the presidentship of the late Mr. Bhurgri, but had to be adjourned for want of a quorum. In 1924, however, some influential Moslem leaders like Mr. M. A. Jinnah thought that the Khilafat Committee's functions having ceased in view of the Turkish deposition of the Khalifa decided to revive the League which met under Mr. Jinnah's chairmanship at Lahore in May 1924. The Lahore session practically did nothing else save to reorganise the scattered branches of the League.

The League in 1923-27.—The 1925 and 1926 sessions of the League were noted for their virility. The Muslims displayed greater allegiance to their communal organisation in proportion to the loyalty of the Hindus to their Maha Sabha. Suspicion and distrust, enmity and open hostility began to prevail between the two communities. Proportionate distribution of the loaves and fishes of office, on the political side, and the questions of the Hindus playing music before mosques and the Mahomedans killing cows, on the religious side, constituted the points of difference which frequently led to inter-communal riots. The situation was regarded with grave concern by serious minded leaders, some of whom, under the leadership of Mr. Jinnah, met at Delhi early in 1927 and offered, in the name of the Muslims, to surrender their right to communal electorates, provided, among other things, Sind was constituted into a separate province and reforms were introduced in the N. W. Frontier Provinces and Baluchistan. This offer, however, was acceptable neither to the Hindus nor the Muslim masses who insisted on the continuance of the separate electorates. A schism set in the Muslim League which was accentuated by the announcement of the personnel of the Statutory Commission on Indian Reforms. The non-inclusion of Indians on the Commission was construed by a certain section of the Muslims as an insult to India; and those who held this view decided to boycott the Commission. The majority of the community, however, thought otherwise and saw great advantages in co-operating in the Parliamentary inquiry and placing before the Commission the demands of the community. Both sections strove to capture the League. The venue of the session was an important factor, and it was thought that if it were held at Lahore, which was the stronghold of the pro-Commissioners, the decision would go against the anti-Commissioners; so the latter manœuvred to hold the session at Calcutta. This was achieved by means of a series of irregularities in procedure which were resented by the Punjab section. The split in the League became definite with the holding of two sessions, one at Lahore which decided to co-operate with the Commission and the other at Calcutta which voted for boycott.

The two sections drifted further and further notwithstanding efforts at approchement made from time to time. The cleavage in the League became permanent, so that those who differed from it and at the same time desired to formulate the views of the entire community with regard to the future constitution of India had to call a separate conference outside the League. The report of the Committee of the All Parties Conference indicated the direction in which the wind was blowing, and the Muslims could not with prudence allow their claims to go unrepresented. The League was no more representative of the entire community, hence the birth of the All Parties Muslim Conference.

The 1928 Session.—The League—or what was left of it after the secession by the Shafi school—met at Calcutta in 1928. Its position was by no means enviable. On the one hand, a rival organisation was being formed in the shape of the All Parties Conference which bade fair to become a permanent body, while the Congress and the All Parties Convention treated the League with scant courtesy. The League session opened with the speech of the President, the Maharaja of Mahmudabad, and concluded after reaching a decision not to co-operate with the All Parties Muslim Conference. The Maharaja of Muhmudabad declared that India's membership of the British Commonwealth gave her a place of undoubtable security and asked whether India could conceive of isolation at a time when Indian nationalism was in an ascent stage. They would have to pass through laborious decades before they reached sturdy manhood, he added. He favoured the Nehru Report in its entirety and advised the League to send its delegates to confer with leaders of other parties and organisations in the Convention with a view to arriving at a settlement of the communal problems. The Subjects Committee of the League followed his advice and sent 20 delegates to the Convention, but to no purpose. Despite Mr. Jinnah's powerful exhortation and Sir Tej Bahadur Sapru's warning, the Convention spurned the Muslims' demand for the reservation of two-thirds the number of seats in the Assembly for Muslims and the vesting of residuary powers in the provinces. The final act of estrangement came when Mr. Jinnah walked out of the Committee of the Convention after a futile endeavour to reach a settlement on the communal question. The League again met, decided to non-co-operate with the All Parties Muslim Conference and adjourned *sine die*, empowering the Council of the League to call a session of the League not later than May 1929.

The All Parties Muslim Conference.—The publication of the Nehru Report hastened the advent of the All Parties Muslim Conference. As one of the speakers remarked, every provision of the report meant some disadvantage to the Muslims and some advantage to the Hindus. The Conference was called to counter-act the effect of the Nehru Report and to formulate the Muslim community's demand in regard to the future constitution of India. By no means was this an easy task; for notwithstanding the refusal of the Jinnah Leaguers to participate in the proceedings, the Conference was attended by almost all the prominent Muslim leaders of the country, including a very large number of the members of the Councils and the Assembly. Although all were determined to maintain the cultural entity of the Muslims intact and to voice Muslim claims with a united voice, there were certain irreconcilable elements whom it was difficult to bring to agree to a common formula. There was ready agreement on the unsuitability of the Nehru Report, but difference of opinion prevailed with regard to the goal of India. Persons like Mr. Mahomed Aii stood for complete independence and, of course, for the boycott of the Commission; while Sir Mahomed Shafi, who had a very large following, favoured co-operation with the Commission in the framing of a constitution within the Empire. Things wore a gloomy aspect for a while, but, thanks mainly to the tact of the President, the Aga Khan, a compromise was reached whereby the mention either of "Dominion status" or "Independence" was omitted from the resolution put before the Conference which demanded merely "a federal constitution". Simiarly it referred neither to the Simon Com-

and large Indian States and groups of smaller States when they join the federation. Every constituent member of the federation should possess plenary powers within its jurisdiction and should have its own legislature and Governor elected by itself. The residuary powers of the federation should rest with the constituent members.

The Calcutta session of the Khilafat Conference was marked by one of the worst schisms that have ever prevailed among the Khilafatists. Although this did not manfest itself in the open session of the Conference, the differences none the less burst out into a free fight at a meeting of the Bengal Committee held to elect delegates to the Conference. As the Bengal Committee was known to be in favour of the Nehru Report the "Independencewallahs" sought to influence the voting for the election of delegates which resulted in great confusion and the manhandling of more than one. Different versions of the incident are current but it seems certain that the trouble arose in consequence of the Ali Brothers "invading" the meeting with a large following.

A few days after the Conference was over disturbances broke out across the North-Western Frontier leading to the abdication of Amanullah whom the Mussulmans of India had learnt to regard as the "King of Islam." They had fondly hoped that Muslims all over the world could be brought together under this new "Khalifa," but it was not to be. They had, therefore, to rest content with expressing sympathy for Amanullah and offering, if the Government of India permitted them to do so to help Amanullah regain his throne.

The Indian Legislature.

His Excellency the Viceroy's address formally inaugurating the Winter Session of the Indian Legislature at Delhi on 2nd February 1928 was more than usually important because of its special reference to the approaching visit of the Statutory Commission. It was almost wholly devoted to that subject. It had, he said, been freely said that His Majesty's Government had done Indians injustice by denying them adequate means to bring Indian influence to bear upon the proceedings of the Inquiry, but such charges arose in part from failure to appreciate features of the scheme which he thought had already sufficiently plainly been stated :

"Apart from such misapprehensions, I am free to admit that the question of whether or not better means could have been devised for associating Indian opinion with the Inquiry which Parliament is bound to undertake is one on which every man is entitled to hold his own view. But though Indian leaders have the right, if they wish, to say that His Majesty's Government have chosen the wrong method of such association (of Indians in the inquiry), they are not at liberty if they desire to retain the character of true counesellors of the people or of honest controversialists to say that His Majesty's Government have not sought means and I would add very full and very unprecedented means of placing Indians in a position to take an ample share with them in the evolution of their country's future."

The Viceroy went on to point out that in such matters the mere form of procedure was of secondary importance. "It is well to remember that constitutional forms are nothing but instruments in the hands of men, responding to the skill of the craftsman as the plain chisel in the hand of the expert sculptor. And as men are greater than the instruments they use, we gravely err if we suppose that complaint, however loud, of the tools which circumstance has placed in our hands, will suffice to induce posterity to hold us guiltless if in the result our workmanship whether through lack of will or of capacity is found wanting. Whatever men may be tempted to think at the present moment, I dare predict that the searching inquest of history will not fail to return judgment against those who sought to use their power to hinder when it was in their power to help."

His Excellency turned to the common statement that His Majesty's Government had deliberately insulted India by excluding Indians from the personnel of the Commission. Honour and self-respect, he said, are not enhanced by creating affronts in our imagination where none in fact exists. "In the present case, British statesmen of all parties have stated in terms admitting of no misconception that the appointment of a Parliamentary Commission was in no way intended as any affront to India. Time and again this assertion has been repeated and I would ask in all sincerity by what right do leaders of Indian opinion, who are as jealous as I am of their own good faith, and would resent as sharply as I any refusal to believe their word, impugn the good faith and disbelieve the plain word of others."

"The Commission," said the Viceroy, "has been appointed with the assent and co-operation of all British parties. They will carry through their Inquiry with, it is hoped, the generous assistance of all shades of Indian opinion. But whether such assistance is offered or withheld, the inquiry will proceed and a report will be presented to Parliament on which Parliament will take whatever action it deems appropriate."

The political spirit which His Excellency in this address endeavoured to dispel brooded over the proceedings of most of the session.

The first official business was the formal introduction of a new **Reserve Bank of India**

Bill. The first Bill of this nature was introduced in the preceding Simla session. The endeavour of a section of the House to secure political representation upon the Bank's directorate led to protracted negotiations and eventually Government found to passage of the measure impossible. During the winter, the Finance Member (Sir Basil Blackett) visited London and thereafter drew up a new Bill which was calculated to meet the reasonable views of all parties concerned. How to proceed with the new measure without delay was problematical, because the original Bill had not formally been withdrawn. Government, being anxious to consult the best wishes of the Assembly and its President, adopted the plan of leaving the old Bill alone and gazetting the new one, so that it might be proceeded with at the earliest possible moment in the new session. It was, in fact, put down on the Order Paper for introduction on the day preceding the Viceroy's inaugural speech.

When the Bill was reached on the Order Paper, the President first called on Mr. Aney, a Mahratta member, who had given notice of a point of order. The latter said the course taken by Government was derogatory to the dignity of the House even though it might technically be legal. There was some discussion, in the course of which the Secretary in the Legislative Department in a long speech showed that under the Rules of the House and in accordance with precedent the proposed procedure was in order. The President, in a long written statement, said the first question was whether the method adopted so violated the proprieties of the House as to constitute an abuse of its forms and procedure. The second point, he said, was whether the procedure proposed was barred by the rule against repetition. He held that the method chosen would not be repetition but violated the proprieties of the House and was an abuse of its procedure, wherefore he declined to call upon the Finance Member to introduce his Bill.

Government thereupon decided to proceed with their original Bank Bill and its consideration was again taken up, together with a large number of amendments. The debate continued nearly three days and a motion for postponement *sine die* was then adopted *nom con*, it having been moved by a non-official member and the Finance Member intimating that if the House desired adjournment he was willing.

The Army Secretary moved consideration of a Bill to amend the **Indian Territorial Force Act** in accordance with the proposals of the Auxiliary and Territorial Force Committee. There was little debate and on the motion of a non-official member the measure was sent to Select Committee. The same course was followed in regard to the Auxiliary Force Amendment Bill, similarly arising. Both Bills were later, without substantial amendment, passed into law. The Army Secretary also moved reference to Select Committee of a Bill to provide for the application of the British Naval Discipline Act to the **Indian Navy.** This was the piece of legislation required to fulfil the conditions necessary to the formal conversion of the Royal Indian Marine into the Royal Indian Navy with right to fly the White Ensign. A member of the Congress party immediately opposed the motion on the ground that expenditure on the new Navy would not be under control by the Assembly. There was considerable debate and the motion was rejected by 55 votes to 54. The effect of the rejection is that the plan for the constitution of the new fighting force is not incommoded, but that as the force will not be under a Discipline Act corresponding with that of other portions of His Majesty's naval forces it will not have the right to fly the White Ensign or to be termed Royal Indian Navy.

The **Statutory Commission** on February 6th addressed to H. E. the Viceroy a letter the main purport of which was to invite the Indian Legislature to elect a Central Committee of co-operation with them in their Inquiry. Lala Lajpat Rai, leader of the Nationalist Party in the Assembly, moved on 16th February a recommendation "that the present constitution and scheme of the Statutory Commission are wholly unacceptable to this House and that this House will therefore have nothing to do with the Commission at any stage and in any form." The debate lasted two days and apart from Government's efforts to encourage a spirit of moderation and reasonableness was mainly characterised by division of opinion between Hindus and Muslims and on the part of the former the strong assertion of the non-co-operation theory which has been the hall mark of the Swaraj Party led by Motilal Nehru since before the inauguration of the Montagu-Chelmsford Reforms. From the Muslim standpoint Sir Zulfiqar Ali Khan moved to the original resolution an amendment declaring "that the procedure put forward by the Indian Statutory Commission merits the favourable consideration of this Assembly." The President at the conclusion of the debate first put the Resolution to the vote and it was adopted by 68 votes to 62.

An outstanding feature of the debate was a speech by Pandit Motilal Nehru reaffirming his position of non-co-operation. He said that his party would at the outset have omitted the word "present" appearing at the beginning of Lala Lajpat Rai's resolution (as quoted above). He argued that the Congress was not concerned with this man or that man, but took its stand upon the broad principle "that Parliament and the British public and the British Government have no shadow of a right to force a Constitution upon us against our will." Doubtless, he said, so long as India was held in her present complete subjection, Britain and Parliament could enforce their will at the point of the bayonet: "but when you talk of giving a measure of freedom to the subject nation, it is hypocrisy, it is dishonesty, to rely upon laws to which that people were not parties, to rely upon those laws, to restrict the limits within which such measure of liberty is to be given." The Pundit asserted that "Congress stands to-day for complete independence." He showed how he had at various times in the Assembly brought forward statements and resolutions on the subject and he added :

"The Congress met and with due regard to all that had happened it definitely and clearly laid down that its goal was complete indepen-

dence. By that I stand and I say by that the whole country stands. It is true that various constitutions have been suggested and various parties talk of Dominion status, by which is understood the kind of Government which prevails in Canada, in South Africa, in Australia and in the Free State of Ireland. Now, I want it to be clearly understood that while the Congress stands for complete independence, it is fully prepared to consult and confer with all the other parties concerned, including the Government, as to the kind of constitution which is to be framed and which is suitable to the circumstances. Now, it is clear that however complete the independence may be there must be some transition period and some transitory provisions to apply to that period. When I say that all parties in India are agreed upon complete independence I mean that when some talk of Dominion status and things like that, all that is meant by them is that that would be only a kind of transitional constitution in order to attain to the goal of independence."

He further said: "My Party has no desire whatever to consult any extraneous body as to what that constitutional is going to be except in so far as the interests of that body itself may be involved and for that purpose we are ready to negotiate, we are ready to enter into arrangements, for the protection of British as well as any other interests that there may be in this country . . . . . . Our position is that we gain our independence whenever it has to come, in the near or distant future, not by the aid of the British Government or through Parliament but by self-determination and by our own strength. That is the decision of the Congress . . . . . ."

The same subject came under discussion in the Council of State on February 22nd when two resolutions were moved, the first and original resolution being by Mr. P. C. D. Chari and recommending the appointment of a Committee to co-operate with the Statutory Commission subject to certain conditions and the other, in the form of an amendment by Sir Maneckji Dadabhai, recommending its appointment according to the conditions offered in Sir John Simon's letter of February 6th. The main feature of the debate was a powerful speech by Sir Sankaran Nair, formerly member of the Viceroy's Executive Council, who said it could not be questioned that Parliament was the final arbiter in the matter, that the formation of a Committee would give Indian politicians a superb chance to put forth their views both to Parliament and to the whole world and that the arguments put forward in support of the boycott of the Commission were the most convincing reasons why the Committee of Co-operation should be appointed. The resolution to appoint a Committee to co-operate on the terms laid down by the Statutory Commission was adopted by 34 votes to 13.

The annual **Railway Budget** was presented by the Hon. Sir George Rainy, Railway Member, in the Legislative Assembly and by the Hon. Sir Austin Hadow, Chief Commissioner for Railways, in the Council of State, on 20th February. It showed that on the final figures for the past year total receipts on commercial lines were estimated at Rs. 103½ crores or nearly Rs. 5 crores higher than in the preceding year and expenditure Rs. 90 2/3 crores, an increase of Rs. 1½ crores, or a little less than the increase in interest charges during the same period. The surplus of receipts over expenditure was estimated at Rs. 12¾ crores, as against Rs. 9 in the Budget and of that strategic railways absorbed Rs. 1 2/3 crores, Rs. 4¾ crores went to the railway reserve fund and the contribution to general revenue was left at Rs. 6⅓ crores.

For the ensuing year, Government proposed reductions in 3rd class fares, in parcels and luggage charges and in four classes of goods rates, namely on kerosine, on manure and oilcake, on jagri and on grain, pulses and oilseeds—all heads selected with special concern for the interests of the poorer classes and agriculturists. Allowing for these changes, the Budget for 1928-29 showed estimated receipts of Rs. 103 crores, total charges Rs. 93 crores, surplus Rs. 9 crores, contribution to revenues Rs. 5½ crores and contribution to railway reserve fund Rs. 3½ crores.

Sir George Rainy emphasized the benefit which both railways and the general Budget had received from the separation of railway accounts from general accounts and showed that his Department had instituted special investigations in that regard with a view to the review of the separation arrangement which was due to come in the ensuing year if the Assembly desired it.

The debates on the Budget were of the customary semi-political tenor, heavily stressed points being control by the Assembly, alleged racial distinctions in the subordinate departments and the demand for rapid Indianisation of the superior railway services.

The **annual general Budget**, the last to be prepared by the Hon. Sir Basil Blackett, was submitted to the Assembly by him and to the Council of State by the Financial Secretary on 29th February. The final accounts for 1926-27 showed a surplus of Rs. 296 lakhs against the revised estimate of Rs. 282 lakhs. The concluding year having shown general trade improvement, the final revised estimates Budget showed revenue and expenditure both at Rs. 125·26 crores, or within Rs. 3 lakhs of the original estimates. The Budget proposals for the ensuing year showed on the existing basis of taxation a revenue of Rs. 132·23 crores, including Rs. 258 lakhs of unremitted Provincial Contributions, but not including any assistance from the revenue reserve fund, and expenditure Rs. 129·60 crores, leaving a surplus of Rs. 263 lakhs, which Government regarded as recurrent. Out of this, the Budget provided for the sacrifice of Rs. 253 lakhs for the final extinction of Provincial Contributions, a step which would thus leave a net surplus of Rs. 5 lakhs.

A special feature of the Budget was the satisfactory Ways and Means statement which it contained. In the five years since 31st March 1913, when the era of post-war deficits ended, unproductive debt was diminished by Rs. 76 crores. The aggregate debt increased by Rs. 113 crores, the net result of this reductiou and of an increase of Rs. 1,89 crores in productive debt. The Finance Department hoped

mission nor to the Nehru Report, but insisted on compliance with the demands of the Conference by any agency which devised a constitution.

The outstanding features of the Conference were its representative and influential character and the Presidential address. The latter was a concise but a forcible statement which emphasised the resolve of the community to maintain its cultural entity. His Highness pleaded for closer contact between the leaders of the Muslim community and the masses, so that the opinions of the latter might be correctly understood and given effect to. The Aga Khan also pleaded for tolerance in respect of cow killing and pointed out that the practice was not enjoined by Islam. "Certainly there is no need to parade sacrificial rites. The flesh and blood of animals do not reach God," he added. The speech produced great effect and the whole session impressed the delegates so well that a proposal was seriously mooted to make the Conference a permanent organisation. If this is accomplished, the Muslim League will have a serious rival.

The Khilafat Committee.

The Central Khilafat Committee owed its origin to the reticence shown by the All-India Congress Committee in 1920 to the question of the Khilafat and Non-co-operation. Messrs. Gandhi and Shaukat Ali started this organisation with a view to educative propaganda throughout the country and, if possible, to capture the Congress. The object of the Committee was stated to be the righting of the Khilafat "wrongs." As a result of intensive propaganda mainly led by Mr. Gandhi himself, prominent Indian publicists supported the view that the Indian Moslems being deeply concerned over the "exploitation of the Holy places of Islam," had a right to expect the Hindus to help them in securing their rights. Soon after, the Madras Khilafat Conference under the chairmanship of Mr. Shaukat Ali unfolded a programme of progressive non-co-operation and appealed to the country for support. The Khilafat Committee, with the huge funds at its disposal, was able to draft in a large number of delegates to the Calcutta special Congress in 1920 when the non-co-operation programme was accepted by that body with two more objects added to it, namely, the obtaining of Swaraj and the righting of the Punjab wrongs.

With the deposition of the Khalifa by the Kemalists and the revival of the Moslem League, the Committee's activities have been considerably restricted. Recently the Committee sent a deputation to Nejd to intervene and settle the dispute between the warring elements. Though the Government of India were willing to permit a deputation of the Committee to Turkey, the Turkish Government did not quite like the idea which had consequently to be abandoned.

The 1925 session of the Khilafat Conference was rendered lively by Mr. Hazrat Mohani whose speech strongly criticising Sultan Ibn Saud was subsequently expunged. The resolution adopted by the conference under the Presidentship of Mr. Abdul Kalam Azad condemned the British policy in Iraq and the League's decision on Mosul and declared that if the Turks went to war on the latter issue the Conference would deem it its duty to help them.

Since then one heard little about the public activities of the Committee, although many of its domestic quarrels engaged the attention of the public. Funds, however, continued to be collected for the "activities" of the Committee which could hardly be specified. Things dragged on until the latter half of 1927, when the leaders found the Khilafat organisation a useful tool for purposes of their propaganda for boycotting the Statutory Commission on Indian Reforms. This was successfully achieved by the extremist wire-pullers at Madras in 1927.

In the next year, however, a peculiar situation arose as the result of the publication of the Nehru Report. This document raised many controversial issues. Its two main recommendations, namely, Dominion status for India and joint electorates with temporary reservation of seats, were not acceptable to the Khilafatists whose ideal was an extreme type of nationalism coupled with rank communalism. They wanted complete independence for India and in the same breath demanded the continuance of separate electorates. This state of mind found expression at the annual session of the Khilafat Conference which met in 1928 at Calcutta.

Mr. Mahomed Ali, who presided, launched a bitter attack on his political opponents, the Nehru school, and affirmed that the Nehru Report had given birth to dissensions in the country to an unparalleled degree. He drew attention to the unseemly quarrel that was going on between Nehru the father and Nehru the son over the Dominion status versus Independence issue and evoked warm enthusiasm among his hearers by declaring that the father might be responsible for the son dangling on the gallows.

A resolution declaring Independence as the goal of India was carried by the Conference, the mover remarking that Dominion status was a form of slavery. Another demanded that the future constitution of India should be so framed as to provide for a federation of "free and united states of India." The federation should consist of fully autonomous provinces of India

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The Indian Legislature.

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Government thereupon decided to proceed with their original Bank Bill and its consideration was again taken up, together with a large number of amendments. The debate continued nearly three days and a motion for postponement *sine die* was then adopted *nom con*, it having been moved by a non-official member and the Finance Member intimating that if the House desired adjournment he was willing.

The Army Secretary moved consideration of a Bill to amend the **Indian Territorial Force Act** in accordance with the proposals of the Auxiliary and Territorial Force Committee. There was little debate and on the motion of a non-official member the measure was sent to Select Committee. The same course was followed in regard to the Auxiliary Force Amendment Bill, similarly arising. Both Bills were later, without substantial amendment, passed into law. The Army Secretary also moved reference to Select Committee of a Bill to provide for the application of the British Naval Discipline Act to the **Indian Navy.** This was the piece of legislation required to fulfil the conditions necessary to the formal conversion of the Royal Indian Marine into the Royal Indian Navy with right to fly the White Ensign. A member of the Congress party immediately opposed the motion on the ground that expenditure on the new Navy would not be under control by the Assembly. There was considerable debate and the motion was rejected by 55 votes to 54. The effect of the rejection is that the plan for the constitution of the new fighting force is not incommoded, but that as the force will not be under a Discipline Act corresponding with that of other portions of His Majesty's naval forces it will not have the right to fly the White Ensign or to be termed Royal Indian Navy.

The **Statutory Commission** on February 6th addressed to H. E. the Viceroy a letter the main purport of which was to invite the Indian Legislature to elect a Central Committee of co-operation with them in their Inquiry. Lala Lajpat Rai, leader of the Nationalist Party in the Assembly, moved on 16th February a recommendation "that the present constitution and scheme of the Statutory Commission are wholly unacceptable to this House and that this House will therefore have nothing to do with the Commission at any stage and in any form." The debate lasted two days and apart from Government's efforts to encourage a spirit of moderation and reasonableness was mainly characterised by division of opinion between Hindus and Muslims and on the part of the former the strong assertion of the non-co-operation theory which has been the hall mark of the Swaraj Party led by Motilal Nehru since before the inauguration of the Montagu-Chelmsford Reforms. From the Muslim standpoint Sir Zulfiqar Ali Khan moved to the original resolution an amendment declaring "that the procedure put forward by the Indian Statutory Commission merits the favourable consideration of this Assembly." The President at the conclusion of the debate first put the Resolution to the vote and it was adopted by 68 votes to 62.

An outstanding feature of the debate was a speech by Pandit Motilal Nehru reaffirming his position of non-co-operation. He said that his party would at the outset have omitted the word "present" appearing at the beginning of Lala Lajpat Rai's resolution (as quoted above). He argued that the Congress was not concerned with this man or that man, but took its stand upon the broad principle "that Parliament and the British public and the British Government have no shadow of a right to force a Constitution upon us against our will." Doubtless, he said, so long as India was held in her present complete subjection, Britain and Parliament could enforce their will at the point of the bayonet: "but when you talk of giving a measure of freedom to the subject nation, it is hypocrisy, it is dishonesty, to rely upon laws to which that people were not parties, to rely upon those laws, to restrict the limits within which such measure of liberty is to be given." The Pundit asserted that "Congress stands to-day for complete independence." He showed how he had at various times in the Assembly brought forward statements and resolutions on the subject and he added:

"The Congress met and with due regard to all that had happened it definitely and clearly laid down that its goal was complete indepen-

dence. By that I stand and I say by that the whole country stands. It is true that various constitutions have been suggested and various parties talk of Dominion status, by which is understood the kind of Government which prevails in Canada, in South Africa, in Australia and in the Free State of Ireland. Now, I want it to be clearly understood that while the Congress stands for complete independence, it is fully prepared to consult and confer with all the other parties concerned, including the Government, as to the kind of constitution which is to be framed and which is suitable to the circumstances. Now, it is clear that however complete the independence may be there must be some transition period and some transitory provisions to apply to that period. When I say that all parties in India are agreed upon complete independence I mean that when some talk of Dominion status and things like that, all that is meant by them is that that would be only a kind of transitional constitution in order to attain to the goal of independence."

He further said: "My Party has no desire whatever to consult any extraneous body as to what that constitutional is going to be except in so far as the interests of that body itself may be involved and for that purpose we are ready to negotiate, we are ready to enter into arrangements, for the protection of British as well as any other interests that there may be in this country . . . . . . Our position is that we gain our independence whenever it has to come, in the near or distant future, not by the aid of the British Government or through Parliament but by self-determination and by our own strength. That is the decision of the Congress . . . . . ."

The same subject came under discussion in the Council of State on February 22nd when two resolutions were moved, the first and original resolution being by Mr. P. C. D. Chari and recommending the appointment of a Committee to co-operate with the Statutory Commission subject to certain conditions and the other, in the form of an amendment by Sir Maneckji Dadabhai, recommending its appointment according to the conditions offered in Sir John Simon's letter of February 6th. The main feature of the debate was a powerful speech by Sir Sankaran Nair, formerly member of the Viceroy's Executive Council, who said it could not be questioned that Parliament was the final arbiter in the matter, that the formation of a Committee would give Indian politicians a superb chance to put forth their views both to Parliament and to the whole world and that the arguments put forward in support of the boycott of the Commission were the most convincing reasons why the Committee of Co-operation should be appointed. The resolution to appoint a Committee to co-operate on the terms laid down by the Statutory Commission was adopted by 34 votes to 13.

The annual **Railway Budget** was presented by the Hon. Sir George Rainy, Railway Member, in the Legislative Assembly and by the Hon. Sir Austin Hadow, Chief Commissioner for Railways, in the Council of State, on 20th February. It showed that on the final figures for the past year total receipts on commercial lines were estimated at Rs. 103½ crores or nearly Rs. 5 crores higher than in the preceding year and expenditure Rs. 90 2/3 crores, an increase of Rs. 1½ crores, or a little less than the increase in interest charges during the same period. The surplus of receipts over expenditure was estimated at Rs. 12¾ crores, as against Rs. 9 in the Budget and of that strategic railways absorbed Rs. 1 2/3 crores, Rs. 4¾ crores went to the railway reserve fund and the contribution to general revenue was left at Rs. 6½ crores.

For the ensuing year, Government proposed reductions in 3rd class fares, in parcels and luggage charges and in four classes of goods rates, namely on kerosine, on manure and oilcake, on jagri and on grain, pulses and oilseeds—all heads selected with special concern for the interests of the poorer classes and agriculturists. Allowing for these changes, the Budget for 1928-29 showed estimated receipts of Rs. 103 crores, total charges Rs. 93 crores, surplus Rs. 9 crores, contribution to revenues Rs. 5½ crores and contribution to railway reserve fund Rs. 3¼ crores.

Sir George Rainy emphasized the benefit which both railways and the general Budget had received from the separation of railway accounts from general accounts and showed that his Department had instituted special investigations in that regard with a view to the review of the separation arrangement which was due to come in the ensuing year if the Assembly desired it.

The debates on the Budget were of the customary semi-political tenor, heavily stressed points being control by the Assembly, alleged racial distinctions in the subordinate departments and the demand for rapid Indianisation of the superior railway services.

The **annual general Budget**, the last to be prepared by the Hon. Sir Basil Blackett, was submitted to the Assembly by him and to the Council of State by the Financial Secretary on 29th February. The final accounts for 1926-27 showed a surplus of Rs. 296 lakhs against the revised estimate of Rs. 282 lakhs. The concluding year having shown general trade improvement, the final revised estimates Budget showed revenue and expenditure both at Rs. 125·26 crores, or within Rs. 3 lakhs of the original estimates. The Budget proposals for the ensuing year showed on the existing basis of taxation a revenue of Rs. 132·23 crores, including Rs. 258 lakhs of unremitted Provincial Contributions, but not including any assistance from the revenue reserve fund, and expenditure Rs. 129·60 crores, leaving a surplus of Rs. 263 lakhs, which Government regarded as recurrent. Out of this, the Budget provided for the sacrifice of Rs. 253 lakhs for the final extinction of Provincial Contributions, a step which would thus leave a net surplus of Rs. 5 lakhs.

A special feature of the Budget was the satisfactory Ways and Means statement which it contained. In the five years since 31st March 1913, when the era of post-war deficits ended, unproductive debt was diminished by Rs. 76 crores. The aggregate debt increased by Rs. 113 crores, the net result of this reductiou and of an increase of Rs. 1,89 crores in productive debt. The Finance Department hoped

before the end of the new financial year almost to liquidate the debt due to the five years of revenue deficits—1918-23; and anticipated that if the present rate of progress could be maintained the unproductive debt would altogether vanish in about 12 years.

The Budget debates in the Assembly were, as usual, the occasion of considerable political demonstration, but the Budget and the taxation proposals for the ensuing year were passed without substantial change.

Among other noteworthy legislation dealt with during the Budget session were sundry tariff matters of greater or less general importance.

AUTUMN SESSION.

The annual autumn session of the Legislature commenced in Simla on 4th September and continued until the afternoon of 25th September. Three main items of business arose, namely, the appointment of a Committee to co-operate with the Statutory Commission, the submission by Government to the Legislative Assembly of a Bill authorising the expulsion of immigrant communist agitators and the question of the creation of a separate Assembly Secretariat. Another question of importance was a Bill by Rai Saheb Harbilas Sarda for the prevention of child marriages, on which the Select Committee report came before the Assembly.

The Government of India decided, in consultation with the chairman of the Statutory Commission, that the Central Committee to co-operate with the Statutory Commission should consist of nine members of whom three should be elected by the Council of State. The Council of State elected Sir Sankaran Nair, Sir Arthur Froom and Nawab Ali Khan, there being keen competition for places and a number of candidates standing. The parties on the Left of the Assembly showing no desire to elect members from that House, the Viceroy nominated five members to the Committee from it. Their names are Sir Zulfikar Ali Khan, Dr. E. A. Suhrawardy, Sir Hari Singh Gour, Rao Bahadur M. C. Rajah, Mr. Kikabhai Premchand. His Excellency further nominated Sardar Bahadur Shivdev Singh Uberoi, a member of the Council of State, to represent the Sikhs. Government appointed Sir Sankaran Nair, chairman of the Committee, which commenced its sittings forthwith.

Government in presenting to the Legislative Assembly their Bill for the expulsion of immigrant **Communist Agitators** who aimed at the destruction of the political, social or economic organisation of the country asserted their judgment that a dangerous situation had arisen and that drastic measures were necessary satisfactorily to meet it. The principal feature of their Bill was the provision of special powers for executive action. The Congress Party led opposition to the measure at every stage, Pundit Motilal Nehru and Mr. Srinivasa Iyengar, both of whom had recenty visited Moscow, strongly denouncing the measure and what was described as the propaganda against communism. The leader of the Nationalist party and his followers appeared to think that the dangerous doctrines of communism would never attract support in India and that to exclude the preaching of communism would be to refuse hospitality to ideas from other parts of the world. The leader of the Independent party opposed the measure on the ground that to assent to it would be to provide Government with an argument for obtaining similarly drastic new executive powers against Indians. The Muslim elected members were almost solidly for the Bill and Muslim members of the Independent party left it on that account. The Bill was referred to Select Committee by a small majority vote but on the motion that the Select Committee's report be taken into consideration a division resulted in a tie and the President gave a casting vote against the Bill on the ground that it was an extraordinary measure which should not be allowed to pass unless its promoters obtained a clear majority.

The President read a lengthy statement setting out his views in favour of the establishment of a **Separate Secretariat for the Legislative Assembly** and his reasons for disagreeing with the objections raised by Government to some of its particulars, especially to the proposal that the new Department should be placed directly under the administrative charge of the President. Government two days later replied with a statement showing their side of the case and published their Despatch to the Secretary of State in the matter. This document showed that in principle Government agreed with the President's proposal and favoured its early adoption but that they disagreed on the question of administration. There followed certain private conferences between the President and Party leaders, including the Home Member as leader of the House. Then followed a debate which showed a general measure of agreement in the plan of placing the administration of the new department directly under H. E. the Viceroy but subject to the condition, suggested in certain quarters, that the main burden of dealing with the separate secretariat staff and with questions connected with it should be undertaken by the Public Services Commission (H. E. the Viceroy in an address to the Assembly on 28th January 1929 announced that, with the sanction of the Secretary of State, a settlement had been reached on those lines and the new Secretariat was instituted in time for the 1929 Budget session.)

Rai Saheb Harbilas Sarda's Bill for the prevention of **Child Marriages** was in its original form confined to Hindus and merely provided that child marriages should not be valid. The Select Committee extended it by making it cover all communities and altered it by inserting provisions making the solemnisation of child marriages or participation in their solemnisation, a criminal offence. These changes aroused considerable new opposition in addition to the earlier widespread opposition of orthodox Hindus. The Muslims largely objected to the Bill being extended to their community on the ground not that they desire child marriages or make them but that some provisions of the new measure conflict with their religious law. There arose the general objection to endeavouring a social reform of the kind desired by legislation. The debates on the Bill were not completed by the end of the session, so that the final conclusion of the matter stood over.

Sport.

1928 was a year of progress for Sport in India-a definite move towards the better control of the various branches having taken place. Previously only Racing was controlled in the real sense of the word but at the end of 1928 there were Associations in being which were looking after the interests of Cricket, Hockey, Boxing, Football and Athletics. Things are still far from being satisfactory, when compared with Continental countries or America for instance, but a distinct advance has been made. The Indian Board of Cricket Control with its several Provincial Control Boards should help the "King of Games" to take a big step forward and the time may not be far distant when India will be taking part in Test Matches. The good a proper organisation can do for any game is reflected in the success of the Indian Hockey Team which won the Olympic Games tournament, the first Olympic honour India has won. Provincial Hockey Associations are now in being and the game should make further progress. Another sporting organisation which came into being during 1928 is the Railway Sports Association, which will look after, and encourage sports among the employees of India's vast railways and a successful football and boxing tournament was held.

Football has two local Associations at Bombay and Calcutta which looks after the game in the Bengal and the Bombay Presidencies but there is still room for more and an All India Federation would improve matters considerably. The main tournaments of the year, the I.F.A. Shield, the Durand, Rovers and Lahore Trades Cups were all very successful.

Amateur Boxing is making great strides, especially in the Bombay Presidency and in the Army but so far there is no All India controlling body. The professional side of the sport is still left to individual promoters but there are signs that a governing body may come into being. It will be all for the good of the game.

Athletics are looked after, to a certain extent, by the Indian Olympic Council but though there are a few Provincial Associations athletics, as a sport, will not make headway till more and better equipped grounds are available. Several of the big centres realise the necessity for Stadiums in which athletics, and other sports could be staged and perhaps, in the near future, they will make their appearance. India sent a team to Amsterdam for the Olympic Games and though no material success was registered a lot of valuable lessons were learned.

Tennis Booming.

Tennis continues to boom and the various tournaments all over the country were well supported. In the Davis Cup too, India did very well indeed and the signs are that in the near future India will be a force to be reckoned with in tennis circles. The various big tournaments in India, however, overlap somewhat and it is a pity that this should be so. Somehow the All India Championships at Allahabad do not draw the cream of India's players and the Lawn Tennis Associations might, with advantage, change the venue of this tournament. The Inter-Provincial contest provide valuable experience for the promising player.

Colonel Winsloe has been doing much propaganda work for the game of Rackets and a revival was noticed. Several tournaments which had been dormant for a number of years took unto themselves new leases of life and the preliminary steps towards forming an All India Rackets Associations were taken.

Rugby is a game which has limited scope in India but the tournaments held at Bombay, Poona, and Calcutta received good support. There was considerable enthusiasm in Bombay when the local fifteen won the All India tournament after a very long period, and though R. G. Hopkins could only take a somewhat depleted team to Calcutta the men rose to the occasion and brought back the trophy.

Rowing and Yachting are sports confined to the favoured few, and the growth of these two branches of sport cannot very well be expected to be great. Golf is played everywhere and all the tournaments proved very successful. One branch of sport which saw increased activity was that confined to motorists in the form of sprint speed trials and reliability tests and there is every indication that they will increase. In fact it is not improbable that 1929 will see the introduction of Dirt Track Motor Cycle Racing.

The Richest Race.

Racing all over India is popular. The Eclipse Stakes, run at Bombay, has become the richest race in the country, no less than a lakh of rupees being given as stakes. The classics, the Viceroy's and the King Emperor's Cups at Calcutta and the Byculla Cup at Bombay created the usual enthusiasm while the opening of the new Barrackpore Race Course was another event notable in the racing records of the year.

The Bombay Quadrangular cricket tournament' took additional interest this year on account of Prince Duleepsinghji ' Ranji's nephew ', who has built up a big reputation in England, playing in it, but despite his help the Hindus were beaten. The winners were the Parsis who once again have to thank their little slow left handed bowler, Jamshedji for their success. It was a victory which did not come too soon and Parsi cricket received a flip it badly needed.

Sport all over India is growing, but in every branch expert coaching is badly needed. Especially is this so in Athletics. There is a wealth of talent in India which only requires developing along the right lines, but at present the budding athlete is left to himself without the practical assistance of the old hand, which is available in other countries. When sport is properly organised, and there is a lot required in this direction yet, then perhaps India will become a force to be reckoned with on the playing fields. To show how badly such authority is needed, it is impossible to record any individual feat of any athlete as being an Indian record, because there is no ruling authority, or specified rules for such attempts, or any particular body who maintains a register for such records. It cannot be done at present unless every meeting in India is held under the same rules and with authorised officials, approved by the ruling body .

A summary of the chief sporting events in 1928 is given in the following pages.

Racing.

Bangalore.

Miller Cup. Distance about 7 furlongs.—

Hajee Sir Ismail Sait's Flintham (8st. 7lbs.) Reylands 1

Ryan's Luxmi (8st 4lbs.) Burn 2

Mr. Reynalds Peculiar (8st' 5lbs). Cooper .. 3

Mr. Patel's Blyth Bachelor (9st 1lb.) Howell 4

Won by ¾ length. Time—1 min. 28 secs

H. H. Yuvaraja of Mysore's Cup. Distance about 1 mile.—

Hajee Sir Ismail Sait's Peg Anthony 8st.) 5lbs.) Rylands 1

Mrs. M. B. White's Kilgarvan (9st. 1lb.) Aldridge 2

Messrs. Radmore and Ruthvens Martens Prodigy (8st. 5lbs.) J. McQuade .. 3

Maharaja of Mysore's Lembas (8st 2lbs.) Hill 4

Won by 1½ length. Time—1 min. 49 1-5 secs.

Barton Cup (Div. I). Distance about 7 furlongs.—

Hoosein Kadom's Woodapple (8st. 2lbs.) McQuade 1

Mr. Sheriff's Hoojaz (8st 1lb.) Rylands .. 2

Mr. Chubildas' Aasuf (8st. 8lbs.) Raymond 3

Mr. Talibs Sayyad (7st 9lbs.) Meekings .. 4

Won by 3 lengths.—Time—1 min. 41 2-5 sec.

Barton Cup (Div. II). Distance about 7 furlongs.

Syed Amin's Aradin (8st 7lbs) Havell .. 1

Mr. Murphy's Baloz (8st. 1lb.) Meekings .. 2

Lt.-Col. Hill's Samarmand (9st 1lb.) Hoyt . 3

Mahomed Burgash's Sarhan II (7st. 1lb.) Rosen 4

Won by a length. Time—1 min. 41 3-5 secs.

Hajee Sir Ismail Sait's Cup. Distance about 7 furlongs.—

His Highness the Maharaja of Mysore's Chinese Honeymoon (8st. 4lbs.) Hill .. 1

Mrs. Maconochie's Birkenhead (9st 2lbs.) Edwards 2

Mr. H. G. Gregson's Yrisshe (7st 5lbs.) M. Hoyt 3

Won by a head; 2¼ lengths ; 1 length. Time 1 min. 31 1- 5secs.

Southern India Cup. Distance about 7 furlongs.—

Messrs. Essaji and Bird's Sans Pareil (7st. 11lbs.) Stokes 1

His Highness the Maharaja of Mysore's Sunama (8st. 4lbs.) Hill 2

Messrs. Essaji and Bird's Our Laddie (8st 5lbs.) Aldridge 3

Mr. J. Murphy's Drummer Boy (10st 7lbs.) Meekings 4

Won by a head; a neck, a head. Time.—1min. 33 1-5 secs.

Krishnaiah Chetty Cup. Distance about 1 mile.—

Mr. S. Mahalla's Tiffah (7st. 9lbs.) Meekings 1

Mr. G. Ardeshir's Najmuzaman (7st 5lbs.) Rosen 2

Mr. Mahomed Burgash's Good Gold (8st 11lbs.) Hoyt 3

Mr. Abdoolla Mana's Josimos (9st) Perkins 4

Won by 1¼ lengths, a neck, ¾ length. Time—1min. 58 4-5secs.

Apollo Cup. Distance about 1¼ miles.—

Mr. Patel's Amar (9st 6lbs.) Howell .. 1

Mr. Hoosein Kadum's Wood Apple (9st 4lbs.) McQuade 2

Messrs. Essaji and Bird's Royal (7st 8lbs.) Stokes 3

Mr. Mahomed Jaffer's Palavi (8st 7lbs.) Aldridge 4

Won by a length. Time—2mins. 26 secs.

Stewards' Cup. Distance about 1 mile.—

Maharaja of Mysore's Sunama (8st 1lb.) Hill 1

Messrs. Essaji and Bird's Our Laddie (8st 2lbs.) Aldridge 2

Mr. Murphy's Drummer Boy (10st 4lbs.) Meekings 3

Lt.-Col. Hill's Osbourne (7st 5lbs.) Hoyt .. 4

Won by ½ length, ¾ length, 1¼ lengths. Time—1min. 45 secs.

Bangalore Cup. Distance about 1¼ miles.—

Messrs. Souter and Simpson's Spivis (8st 7lbs.) Edwards 1

Sir Ismail Sait's Marlin (7st 6lbs.) Stokes .. 2

Maharaja of Venkatagiri's Red Cockade (8st. 6lbs) Aldridge 3

Messrs. Souter and Simpson's White Ornament (8st. 8lbs.) McQuade 4

Won by 1½ lengths; ¾ length; 1½ lengths. Time—1min. 11 1-5 secs.

Bobbili Cup. Distance about 1½ miles.—

Mr. Talib's Sayyad (9st. 2lbs.) Howell .. 1

Mr. Talib's Tajilmulk (9st. 2lbs.) Perkins .. 2

Mr. S. B. Contractor's Subram (7st 11lbs.) Meekings 3

Messrs. Essaji and Bird's Royal (8st 10lbs.) Stokes 4

Time —2mins. 29 1-5 secs.

R. C. T. C. Cup. Distance about 1¼ miles.

Mr. A. A. R. Cope's Red Connors (8st 4lbs.) Edwards 1

Mrs. White's Kilgarvan (9st 3lbs.) Aldridge 2

Sir Ismail Satt's Peg Anthony (9st) Rylands 3

Mr. Dee's Sweet Friendship (7st 10lbs.) Cooper 4

Won by 5 lengths. Time—2 mins. 11 1-5 secs.

Madras Cup. Distance about 7 furlongs.—

Mr. Murphy's Primer (9st) Meekings .. 1

Mr. Kent's Lady Fayre (8st 3lbs.) Hoyt .. 2

Messrs. Irwin Jones and Jackson's Golconda (8st 13lbs.) Rylands 3

Mr. Annamali Chettiar's Square Draw (8st 13lbs.) Hill 4

Won by 3 lengths, 2 lengths. Time—1min. 31 secs.

Barrackpore.

Club Cup (Div. I.). Distance 1¼ miles.—

Mr. A. Curlander's Golden Pospect (8st 1lb.) Bond 1

Messrs. Edmondson Eddis and Raddior's Irish Magie (9st 3lbs.) Balfour 2

Mr. H. K. Dey's Fanos (9st 2lbs.) Ringstead 3

Hajee Sir Ismail Sait's Killarney (8st 8lbs.) Forbes 4

Won by short head; neck; 1 length. Time—2 mins. 104-5 secs.

Club Cup (Div. II.) Distance 1¼ miles.—

Messrs. Gilford and Melyees' Son gar (8st 4lbs.) Edwards 1

Mr. E. Dee's Sweet Friendship (8st 4lbs.) Cooper 2

Hon. Mr. R. Gujadhar's George's Bird (7st 12lbs.) J. Brown 3

Mr. J.D. Scott's Bluster (8st 7lbs.) Parker .. 4

Won by 3 lengths; short head; 2 lengths. Time—2mins. 12 1-5secs.

Cubitt Cup. Distance 6 furlongs. (straight).—

Messrs. Sontar and Simpon's Aggravation (7st 11lbs.) 1

Mr. H. G. Gregson's Swan (9st 3lbs.) Hutchins 2

Mr. A. Curbudar's Corhali (8st 13lbs.) Bond 3

Mr. Pennick' sDanduloo (7st 10lbs.) J. Brown 4

Won by 1 length, 2½ lengths; a head. Time.—1min. 13 3-5secs.

Barrackpore Spring Cup (Div. I). Distance 1¼ miles.—

Miss R. Prophill's Summertime (8st 9lbs.) Ringstead 1

Mr. A. Curlender's Clem (7st 11lbs.) Bond 2

Mrs. J. Mein Austine's Thundering Legion (9st 2lbs.) Edwards 3

Mr. B. E. G. Eddie's Spring Running (8st 6lbs.) Bulfour 4

Won by a neck, ½l ength, 1¼ length. Time.—2mins. 7 1-5secs. .. ..

Barrackpore Spring Cup (Div. II). Distance 1¼ miles.—

Mr. Hat's Royal Bean (8st 13lbs.) Marland 1

Mr. E. Bee's Glenbale (8st) Cooper 2

Messrs. Edmonson Edilis and Roddick's Irish Magic (7st 9lbs.) Balfour 3

Mr. T. Burridge's Work of Art (7st 13lbs.) March 4

Won by ½ length, 1¼ length; 2 lengths. Time.—2mins. 7 4-5 secs.

Bombay.

The Turf Club Cup. Distance 1¾ miles—

Mr. H. M. Mahomed's Hila-Luzzaman (9st. 7lbs.) Morris and Mr. E. L. F. De Soysa's Tiger King Dead (8st. 10lbs.) Howell .. .. heat 1

Mr. Eve's Turick (7st. 5lbs.) carried, (7st. 6 lbs.). C. Hoyt.. 3

Mr. A. M. Khairaz's Rehearsal (7st. 8lbs.) .. 4

Won by Dead heat, 1½ length; length. Time—3 mins. 181-5 secs.

The Byculla Club Cup. Distance 1¾ miles—

H. H. the Aga Khan's Astre D'or (8st.) A. C. Walker 1

Mr. M. C. Patel's Moss (9st. 7lbs.), Barnett 2

H. H. the Maharaja of Rajpipla's Melesigenes (9st. 4lbs.), Townsend 3

Mr. J. C. Galstaun's Ox Trot (7st. 4lbs.), S. Black 4

Won by ¾ length, head, neck. Time—3 mins. 3-5 secs.

The Mansfield Plate. Distance 6 furlongs—

Mr. Shantidas Askuran's Yesington Planet (7st. 7lbs, carried (7st. 9 lbs.), Burn .. 1

Mr. J. C. Galstaun's Golden Quest (7st. 12lbs.) carried (7st 13lbs.), Herbert .. 2

Mr. P. B. Avasia's Wedding Day (6st 12lbs), carried (7st. 1lb.), S. Black.. 3

H. H. the Aga Khan's Quincy (9st. 10lbs.), A. C. Walker 4

Won by neck, neck, neck. Time—1 min. 12 4-5secs.

The Cambridgeshire Stakes (Div. 1.) Distance 1 mile, 1 furlong—

Mr. R. H. Gahagan's Polychrome (9st. 3lbs.), Bowley 1

Mr. J. Reynolds' Poor Scats (8st. 8lbs.), C. Hoyt 2

Mr. Stone's Starboard (8st. 10lbs), ; Howell 3

Mr. Shuttleworth's P's and Q's (8st. 6lbs), A. C. Walker 4

Won by 1½ lengths; ½ length; 3 lengths. Time—1min. 53 3-secs.

The Cambridgeshire Stakes. (Div. 11.) Distance 1 mile—1 furlong—

Mr. P. B. Avasia's Gamvros (8st. 6lbs.), J. Rosen 1

H. H. the Maharaja of Kolhapur's Radha Piari (9st. 4lbs.) R. Stokes 2

H. H. the Maharaja of Kolhapur's Gapencais (8st 12lbs.), Herbert 3

Mr. J. J. Murphy's Brave Colleen (8st. 4lbs.), A. C. Walker 4

Won by neck, 1 length; 1½ lengths. Time—1min. 54 1-5secs.

The Kholhapur Plate. (Div. 1.) Distance 1 mile—

Mr. J. A. Wadia's Kadoor Beg (7st. 6lbs. carried (7st. 7lbs.), F. Black 1

Mr. Ebrahim Sulleman's Dhidha'a (8st. 10 lbs.), Barnett 2

Mr. Eve's Mozan (9st. 7lbs)., C. Hoyt .. 3

Mr. S. N. Zodge's Ahyid (9st. 8lbs.), Perkins 4

Won by ¾ length; ½ length; head. Time—1min. 49secs.

The Rajpipla Gold Cup. Distance 1 mile—

Mr. R. H. Gahagan's Wild Argosy (9st. 3lbs.), Bowley 1

H. H. the Aga Khan's Quincy (9st. 10lbs.), A. C. Walker 2

H. H. the Maharaja of Rajpipla's Gift of the Glen (7st. 10lbs.), Townsend .. 3

Mr. Shantidas Askuran's Defend (8st. 7lbs.), Burn 4

Won by neck; head; neck. Time—1min. 37secs.

The Malabar Hill Plate. Distance 6 furlongs—

Mr. Vivian's Eltonian (9st. 2lbs.), Townsend 1

Mr. V. Rosenthal's Wooer (9st. 2lbs.), Morris 2

H. H. the Maharaja of Kolhapur's Invinola (7st. 8lbs.), R. Stokes 3

Mr. Pannick's Harvest Star (8st. 9lbs.), L. Brown 4

Won by neck; head; 3 lengths. Time—1min. 11 4-5 secs.

The Bombay Arab Derby. Distance about 1½ miles—

Mr. Health's Mansoor Beg (9st. 8lbs.), A. K. Obaid 1

Mr. A. C. Ardeshir's Sarsam (7st. 8lbs.), H. McQuade 2

Mr. Alwan Umar's Gog (8st. 8lbs.), Perkins 3

Mr. Akbarali and Seth Kimatrai's Lucky Star (9st. 5lbs.), L. Jones 4

Won by ½ length short head; 3 lengths. Time—2mins. 58 2-5secs.

The Adelaide Plate. Distance 6 furlongs—

Mr. Eve's The Konk (9st. 2lbs.), C. Hoyt .. 1

Mr. Kelso's Henrietta (7st. 6lbs.,) J. Rosen 2

Mr. Sultan M. Chinoy's Modesty (7st. 7lbs.) F. Black 3

Mr. H. Ismail's Ballybrophy (7st. 7lbs.), Ashwood 4

Won by short head; neck; neck. Time—13 secs.

The Colaba Cup. Distance 1 mile—

Mr. M. C. Patel's Thaxted (8st. 2lbs.) car. 8st. 3lbs.), Barnett 1

Mr. Pannick's Gauntlet (9st.), L. Brown .. 2

Mr. G. D. Shuttleworth's P's and Q's (8st. 6lbs.), H. McQuade.. 3

Mr. Eve's Gallant Gael (7st. 13lbs.), J. W. Brace 4

Won by ½ length ; head ; ½ length. Time—1 min. 38 secs.

The Willingdon Plate. Distance 1 mile—

Mr. G. E. D. Langley's My Lord (8st.), Burn 1

H. H. the Maraharja of Rajpipla's Gift o' the Glen (8st. (4lbs.), Townsend 2

Mr. A. M. Irani's French Briar (7st. 12lbs), Ashwood 3

H. H. the Maharaja of Kolhapur's Joe's Luck (7st. 13lbs.), Herbert 4

Won by ½ length ; 1 length; ½ length. Time—1 min. 37 3-5 secs.

The C. N. Wadia Gold Cup. Distance 1 mile, 5 furlongs—

H. H. the Maharaja of Rajpipla's Melesigenes (9st. 1lb.), Townsend 1

Mr. M. C. Patel's Moss (9st. 5lbs.), Barnett .. 2

Mr. R. H. Gahagan's Aborigine (9st. 1lb.), L. Brown 3

Mr. Eve's School Boy (9st. 1lb.), C. Hoyt .. 4

Won by ½ length ; head ; 2 lengths. Time—2 mins. 47 3-5 secs.

The Druids Lodge Handicap. Distance 7 furlongs—

Mr. Shantidas Askuran's Defend (9st. 5lbs.), Burn 1

Mr. C. N. Wadia's Bayonne (7st. 10lbs.), H. McQuade 2

Mr. Stone's Starboard (7st. 3lbs.), Rankin 3

Mr. J. C. Galstaun's Golden Quest (8st. 12lbs.), Herbert 4

Won by ¾ length ; ½ length ; 1 length. Time—1 min. 24 3-5 secs.

The Grand Western Handicap. Distance 1½ miles—

Mr. J. C. Galstaun's Dark Orient (7 st.12lbs.), F. Black 1

Mr. Eve's The Count (7st. 1lb.), Ashwood .. 2

H. H. the Maharaja of Rajpipla's Gift o' the Glen (8st. 3lbs.), Townsend 3

Mr. R. H. Gahagan's Aborigine (8st. 8lbs.), Bowley 4

Won by 4 lengths ; short head ; neck. Time—2 mins. 4 4-5 secs.

The Gough Memorial Plate (Div. I). Distance 7 furlongs—

Mr. Stephen bin Hanna's Tyrant (8st. 2lbs, car. 8st. 4lbs.), Barnett 1

Mr. Heath's Mayiah (8st. 8lbs.), A. K. Obaid 2

Mr. S. Mahalla's Moosad (7st. 6lbs., car. 7st. 9lbs.), Bullock 3

Mr. A. R. Taha's White Cross (7st. 13lbs., car. 8st.), Howell 4

Won by 1 length; short head; ½ length. Time—1 min. 37 secs.

The Gough Memorial Plate (Div. II). Distance 7 furlongs—

Mr. A. R. Taha's Sheema (8st. 6lbs.), A. K. Obaid 1

Mr. Dawood Isak's Fairdoss (7st. 4lbs., carried 7st. 6lbs.), H. McQuade 2

Mr. J. A. Wadia's Kadoor Beg (8st. 2lbs.), Howell 3

Mr. Ebrahim Sulleman's Dhidha's (9st. 1lb.), Barnett 4

Won by 1½ lengths ; 2 lengths ; 3 lengths. Time—1 min. 34 1-5 secs.

The Doncaster Plate. Distance 6 furlongs—

Mr. Vivian's Eltonian (9st. 4lbs.) Townsend .. .. } Dead heat 1
Mr. M. C. Patel's Restoration (8st 3lbs.), Barnett .. .. .. }

Messrs. Heath and M. Najmuddin's Stone Marten (8st. 9lbs.), A. K. Obaid 3

Mr. C. N. Wadia's Leinster Wonder (9st. 6lbs.), Morris 4

Won by dead heat ; 2 lengths ; 2½ lengths. Time—1 min. 15 secs.

The Fort Plate (Div. I.) Distance 1 mile—

Mr. J. Carvalho's Jubilant (7st. 6 lbs.) J. Rosen 1

H. H. the Maharaja of Kolhapur's Vikramsinha (8st.), Herbert 2

Messrs. Heath and W. Bird's Bentoi (7st. 12 lbs.), Ashwood 3

Mr. J. J. Murphy's Philanderer (8st 9lbs.), H. McQuade 4

Won by ½ length ; ¾ length ; head. Time—1min. 39 secs.

The Fort Plate (Div. II.) Distance 1 mile.—

Mr. M. C. Patel's Jovial William (7st. 4 lbs., carried 7st. 7 lbs.), Ashwood 1

Mr. E. S. Godfrey's Ismet (8st. 9 lbs.), Bullock 2

Mr. J. J. Murphy's Burnham Beeches (9st. 2 lbs.), Easton 3

Messrs. N. Begmahomed and H. Ismail's Lucky Lad (8st. 11 lbs.), Burn 4

Won by ¾ length; 1 length; 2½ lengths. Time.—1 min. 39 secs.

The Dealers' Plate. Distance 1 mile—

Mr. Heath's Mansoor Beg (9st. 7lbs.), A. K. Obaid 1

Mr. Akbarali and Seth Kimatrai' Lucky Star (9st.), L. Jones 2

H. H. the Maharaja of Rajpipla's Rarity (8st. 10 lbs.), Townsend 3

Mr. R. H. Gahagan's Noman (8st. 2lbs.), H. McQuade 4

Won by ¾ lengths; 6 lengths; short head. Time.—1 min. 48 secs.

The Importers' Plate. Distance about 1½ miles.—

H. H. the Maharaja of Kolhapur's Shivaniwas (7st. 12 lbs.), R. Stones 1

Messrs. Heath and W. Bird's Tristan (9st.), A. C. Walker 2

Mr. Eve's The Sliding Stone (8st. 13lbs.), J. W. Brace 3

Mr. G. D. Shuttleworth's Tycho (8st.), H. McQuade 4

Won by neck; 2 lengths; 2 lengths. Time.—2 mins. 39 1-5 secs.

The Eclipse Stakes of India. Distance 1¼ mile—

Mr. M. C. Patel's Moss (9st. 8lbs.), Barnett. 1

Mr. R. H. Gahagan's Wild Argosy (9st 7 lbs.), Bowley 2

H. H. the Maharaja of Kolhapur's Star of India (9st). Herbert 3

Mr. C. N. Wadia's Coq-A L'Ane (8st. 7 lbs.), H. MacQuade 4

Won by neck; 2 lengths; 2 lengths. Time.—2 mins. 5 2-5 secs.

The Bombay City Plate. Distance 1¼ miles.—

Mr. A. Hoyt's Bell Metal (8st), C. Hoyt .. 1

Mr. R. H. Gahagan's Aborigine (9st. 7lbs.), Bowley 2

H. H. the Maharaja of Rajpipla's Melesigenes (9st), Townsend 3

Mr. Kelso's Casino (7st. 7lbs.), H. McQuade. 4

Won by 1½ lengths; ½ length; short head. Time.—2 mins. 6 1-5 secs.

The Innovation Plate. Distance 7 furlongs—

H. H. the Aga Khan's Quincy (9st 2lbs.), A. C. Walker 1

Mr. A. Hubib's Ulster Ally (8st. 4lbs.), Barnett 2

Mr. Pannick's Harvest Star (8st. 5lbs.), L. Jones 3

H. H. the Maharaja of Kolhapur's Joe's Luck (7st. 11lbs.), Herbert 4

Won by neck; neck; 3 lengths. Time.—1 min. 25 secs.

The Tom Le Mesurier Plate (Div. I.) Distance 6 furlongs—

H. H. the Maharaje of Kolhapur's Cheerful (6st. 13lbs., car. 7st. 3lbs.), R. Stokes .. 1

Mr. E. H. Ghazala's Ghazuwan (8st. 10lbs.), A. C. Walker 2

Mr. Shantidas Askuran's Jodi (9st. 3lbs.), Burn 3

Mr. R. H. Gahagan's Hashash (7st. 12 lbs.), Ashwood 4

Won by 5 lengths; ¾ length, head. Time—1 min. 18 3-5 secs.

The Tom Le Mesurier Plate (Division II.) Distance 6 furlongs—

Messrs. Heath and W. Bird's Mashalla (9st.) A. K. Obaid .. .. ..

Mr. M. C. Patel's Amood (8st. 8lbs.), Perkins 2

Mrs. J. H. Mashal's Masud Beg (7st. 12 lbs.), H. McQuade 3

Mr. J. A. Wadia's Kadoor Beg (7 st. 8 lbs.), J. Rosen 4

Won by neck; short head. Time—1 min. 20 3-5 secs.

The Danebury Handicap. Distance 6 furlongs—

Mr. R. H. Gahagan's Wild Argosy (9st. 6 lbs.) Bowley 1

H. H. the Maharaja of Kolhapur's Invinola 7 st. 12 lbs.) R. Stokes 2

Mr. V. Rosenthal's Wooer (9st. 8 lbs.) Morris 3

Mr. R. H. Gahagan's Burgos (7st. 1lbs. car. 7 st. 3 lbs.), Rosen 4

Won by neck; neck, head. Time.—1 min. 13 1-5 secs.

The Perth Plate. Distance 1¼ mile—

Mr. R. H. Gahagan's Aborigine (8st. 6 lbs.), Bowley 1

H. H. the Maharaja of Kolhapur's Prey (7st. 3 lbs.), R. Stokes 2

Mr. C. N. Wadia's Coed Canlas (8st. 1 lb), Morris 3

Mr. Eve's The Count (7st. 5 lbs.), Rankin. 4

Won by neck; 1 length; 1 length. Time—2 mins. 7 2-5 secs.

The Final Plate. Distance 1¼ mile—

H. H. the Maharaja of Kolhapur's Salonic (8st. 2 lbs.), Clarke 1

Messrs. A. R. J. Talib and A. L. J. Talib's Weldon (7st. 10 lbs), Ahmed Ali .. 2

Mr. A. R. Taha's White Cross (8st. 3lbs), T. Hill 3

Mr. J. A. Wadia's Kadoor Beg (8st. 8lbs.), Howell 4

Won by head; 1½ lengths; ¾ length. Time—2 mins. 21 3-5 secs.

The Good-Bye Plate. Distance 1 mile—

Mr. Shantidas Askuran's Ian Ban (8st 11lbs.), Burn 1

Mr. Eve's Chapatti (7st. 11lbs., car. 7 st. 12 lbs.), J. W. Brace 2

Mr. Pannick's Chinese Saint (7st. 10lbs.), C. Hoyt 3

Mr. P. B. Avasia's Gamvros (8st. 13lbs.), S. Black 4

Won by ½ length; ½ length; neck. Time.—1 min. 40 3-5 secs.

The Queensberry Handicap. Distance 1 mile—

Messrs. Heath and W. Bird's Atreas (8st. 4lbs.), A. C. Walker }
Mr. E. J. Gubbay's Gadget (7st. 9 lbs.), J. Rosen .. .. .. } Head heat 1

Mr. P. B. Avasia's' Diagram (8st. 12 lbs.), Perkins 3

H. H. the Maharaja of Kolhapur's Eclair (8st. 13 lbs.), Clarke 4

Won by dead heat; 1½ lengths; neck. Time.—1 min. 38 4-5 secs.

The Sir Leslie Wilson Gold Cup. Distance 1¼ miles—

Mr. H. M. Mahomed's Hilaluzzaman (10st. 2 lbs.), Morris 1

Mr. M. C. Patel's Kadir Hajaz (7st. 8lbs.), Clarke 2

Mr. A. M. Khairaz's Rehearsal (7st. 12lbs.), Howell 3

Mr. Akbarali and Seth Kimatrai's Lucky Star (9st. 12lbs.), A. K. Obaid 4

Won by short head; 2 lengths; a length. Time—2 mins. 17 1-5 secs. (Record time.)

The Northumberland Handicap. Distance 2 miles—

Mr. Eve's Aldergrove (7st. 4lbs., car. 7st. 5 lbs.), H. McQuade 1

Mr. Eve's Pride of Priestown (7st 11 lbs.), Ritchie 2

H. H. the Aga Khan's Astre D'Or (9st. 9lbs.), A. C. Walker 3

Mr. M. Dhalla's Fun of the Fayre (8st. 6 lbs.) Howell 4

Won by ½ length; ½ length, 1½ lengths. Time.—3 mins. 27 1-5 secs.

Calcutta.

Ronaldshay Cup. Distance 6 furlongs—

H. H. the Aga Khan's Quincy (9st. 7 lbs.), A. C. Walker 1

Mr. V. Rosenthal's Wooer (9st.), Hutchins . 2

Mr. A. S. Bowe's Cloughane (8st.), Balfour 3

H. H. the Maharaja of Mysore's Affable (9st. 7 lbs.), Howell 4

Won by 1 length; short head; 2½ lengths. Time—1 min. 14 secs.

Indian Grand National. Distance about 3 miles—

Mr. C. J. H. Bolton's Rich Paire (10st. 13lbs.), Jackson 1

Capt. E. L. Turner's Llyn Elgian (10st. 12 lbs.), Capt. Sassoon 2

Mr. R. C. Pollard's Folly II. (10st., car. 10st. 1lb.), Owner 3

Mr. J. D. Scott's Honolulu (11st. 4lbs.), Capt. Newill 4

Won by 4 lengths; 40 lengths; 10 lengths. Time—6 mins. 12 secs.

Cooch Behar Cup. Distance 1 mile, 3 furlongs—

Raikut of Baikunthapur's Gay Bengal (7st., car. 7st 6lbs.), Meekings 1

Mr. J. C. Galstaun's Ox Trot (7st. 12lbs.), A. C. Walker .. ..

Miss M. Prophit's Golden Trace (8st. 5 lbs.), Parker 3

Mr. Pannick's Harvest Star (9st.), L. Brown. 4

Won by a neck; a head and 3 lengths. Time—2 mins. 22 1-5 secs.

New Year Plate. Distance 6 furlongs—

Mr. H. G. Gregson's Louvarissa (9st. 5lbs.), Hutchins 1

Mr. A. Curlender's Corhali (8st. 9lbs.), Bond 2

Mr. Pannick's Gauntlet (9st. 1lb.), L. Brown 3

Mr. N. Begmahomed's Bright Bird II. (8st. 4 lbs.), Howell 4

Won by a neck; 1¼ lengths; a short head. Time—1 min. 41 4-5 secs.

Tally Ho Steeplechase. Distance about 2½ miles—

Mr. J. D. Scott's Honolulu (11st. 3lbs.), Vinall 1

Capt. West and Mr. Dillon's Huon River (10st. 2 lbs.), Bloss 2

Mr. R. C. Pollard's Folly II. (10st 1lb.), Owner 3

All others fell.

Won by 30 lengths; distance. Time—5 mins. 16 2-5 secs.

The Macpherson Cup. Distance 1½ miles—

Mr. Eve's Pride of Priestown (8st.), Brace .. 1

Mr. H. G. Gregson's Stolen Hours (9st. 2lbs.), Hutchins 2

Mr. E. J. Gubbay's Gadget (7st. 6bs, car. 7st. 7 lbs.), Marland 3

Mr. E. Dee's Snowdrift (7st. 6 lbs., car. 7st. 7 lbs.) Meekings 4

Won by ¾ length; 2½ lengths; 3½ lengths. Time—33 3-4 secs.

The Beresford Cup. Distance 1¾ miles—

Mr. Eve's Chapatti (8 st. 2 lbs.), Brace .. 1

Messrs. Douetil's and Hartley's Kilbuck (8st. 3 lbs.), Sibbritt 2

Mr. A. D. Gordon's Sadir (8st. 5lbs.), Marland 3

Mr. J. Mein Austin's Medicine Owl (9st. 4 lbs.), Parker 4

Won by 1½ length; 2 lengths; head. Time—3 mins. 4 secs.

The Prince of Wales Plate. Distance 1 mile—

Mr. Eve's Hoppy (7st. 6 lbs), Meekings .. 1

Mr. J. C. Galstaun's Golden Quest (9st. 3lbs.), Aldridge 2

Mr. H. K. Dey's Glastonbury (7st. 4lbs.), Alford 3

Mr. A. A. Bowie's Cloughane (9st. 3lbs.), Balfour 4

Won by ½ length; short head; 2½ lengths. Time—1 min. 40 secs.

Carmichæl Cup. Distance 1¼ miles—

Mr. Kelso's Ventose (9st. 1lb), A. C. Walker 1

Mr. A. E. Ephraum's Jingle (9st. 6lbs.), Howell 2

Mr. A. A. Bowie's Nightjar (9st. 6lbs.), Parker 3

Mr. C. N. Wadia's Domestic Bond (8st. 3 lbs.), Sibbritt 4

Won by a head; ¾ length 2 lengths. Time—2 mins. 8 4-5 secs.

Governor's Cup. Distance 1¾ miles—

Mr. H.G. Gregson's Stolen Hours (7st. 1lb)., Ashwood 1

Mr. A. A. Bowie's Nightjar (10st. 3lbs.,) Parker 2

Mr. Eve's Pride of Priestown (7st. 2lbs.), Murch 3

Mr. E. J. Gubbay's Gadget (7st), Alford.. 4

Won by 12 lengths; 3 lengths; 4 lengths. Time.—3 mins. 2 4-5 secs.

Monsoon Cup. Distance 1 mile, 3 furlongs.—

Mr. A. Curleendar's Clem (8st. 12lbs), Bond 1

Mr. V. T. Stephen's Thistle Glass (7st 9lbs), A. C. Walker 2

Mr. H. G. Gregson's Strongsay (8st 3lbs), Marland 3

Mr. B. E. G. Eddis' Spring Running (9st), Balfour 4

Won by a head. Time—2 mins. 22 1-5 secs.

August Cup (Div. I.) Distance 1 mile 1 furlong—

Rani of Nazargunj's Desmond Belle (8st 2lbs), Edwards 1

G. P. Mackenzie's Cerulean (9st 2lbs), Meekings 2

M. C. Gregory's Bramhope (7st 13lbs), H. Walker 3

H. B. Turle's Murlough (8st 7lbs), Balfour.. 4

Won by 1¼ lengths. Time—1min. 59 3-5 secs.

August Cup (Div. II). Distance 1 mile 1 furlong—

E. Dee's Balloon Hill (8st 9lbs), Brown .. 1

O. Martin's Happy Land (7st 12lbs), Bond .. 2

H. H. the Maharaja of Manipur's Purvuns (7st. 12 lbs), Marland 3

Capts. Cox and Creagh's Langary Gate (8st. 3lbs), O'Neale 4

Won by 1¾ lengths. Time—2 mins. 2-5 secs.

King-Emperor's Cup. Distance 1 mile.—

Messrs. G. H. Essajee and Bird's Atreas (9st 3 lbs.), Sibbritt 1

Mr. Annandale's Night Jar (9st 3 lbs.), Balfour 2

Mr. Pannick's Silver Lark (9st 3 lbs) L. Brown 3

Mr. C. N. Wadia's Cap-a-Pie (9st 3 lbs.) C. Hoyt 4

Won by ¾ length, 1¼ lengths, short head. Time.—1 min. 40 2-5 secs.

The Viceroy's Cup. Distance 1¾ miles.—

H. H. the Aga Khan's Astre D'Or (9st 3lbs) A. C. Walker 1

Mr. Pannick's Silver Lark (9st 3 lbs) Northmore 2

Mr. Annandale's Night Jar (9st 3 lbs.) Balfour 3

Mr. C. N. Wadia's Cap-a-pie (9st 3 lbs) C. Hoyt 4

Won by ½ length. Time.—3 min. 1 3-5 secs.

Mayfowl Cup.—Distance 1 mile.—

Mr. J. C. Galstaun's Dark Orient (8st 5lbs) Marland 1

Miss M. Prohit's Golden Trace (8st) Balfour. 2

Maharajah of Kolhapur's Star of India (8st 2lbs) A. C. Walker .. } Dead heat 3
Mr. J. C. Gaulstaun's Golden Quest (8st 2lbs) Aldridge .. .. }

Won by ¾ length, a neck, dead heat. Time.—1 min. 40 2-5 secs.

Burdwan Cup. Distance 1¾ miles.—

Major C. M. Stewart's The Early Settler (10st 3lbs. carried 10st 5lbs.), Capt. Tudor 1

Mr. C. H. Bolton's Righ Paire (10st 7 lbs) Jackson 2

Mr. Pannick's Vixen's Holt (10st 3 lbs) S. Brown 3

Maharaja of Kolhapur's Shivaniwas (10st 3lbs) Alford 4

Won by ¾ length, 6 lengths, 7 lengths. Time.—3 mins. 22 1-5 secs.

Merchants Cup.—Distance 1½ miles.—

H. H. the Maharaja of Kolhapur's Vijayakumar (8st 3lbs) A. Clarke 1

Mr. Pannick's Dandaloo (8st 3lbs) L. Brown 2

Mr. Eve's Pride of Preston (8st 9lbs) Brace .. 3

Miss M. Prohit's Summertime (7st 6lbs) Sherry 4

Won by a head, 2½ lengths, 2½ lengths. Time.—2mins. 36 2-5 secs.

Ceylon.

Easter Cup (Div. I). Distance 6 furlongs.—

Mr. Koo's Slippery John (8st 2lbs.) B. Rosen 1

G. M. Bartlet's Gripper (9st) Harrison .. 2

Colonel Bayly's Georgies Pet (8st 12lbs) White 3

Won by 4 lengths, 2 lengths Time 1min. 13 3-5 secs.

Easter Cup (Div. II). Distance 6 furlongs—

Mr. Callender's Elmland (8st 10lbs) Brownlee 1

Baillie Hamilton and Cowan's Dee Street (8st 12lbs) White 2

W. D. Fernando's Chepstow Lass (8st 9lbs) Hill 3

Won by 3½ lengths, a head. Time— 1min 13 2-secs.

Oriental Cup (Div. I). Distance 1 mile.—

Mr. Patrick's Peacock (8st 3lbs) B. Rosen .. 1

Mr. A. E. Ephraum's Rummah (7st 13lbs) Wright 2

Mrs. F. H. Perera's Young Zaitoon (7st 12lbs) Harrison 3

Mr. Fred Abeyesundera's Swari (8st 4lbs) Reid 4

Won by a neck, ½ length. Time— 1min. 54 4-5 secs.

Oriental Cup (Div. II). Distance 1 mile.—

Mr. Woodpecker's Mahir (8st) Boughton .. 1

Mr. R. Alford's Gowahjmer (8st 5lbs.) Macpherson 2

Mrs. M. Reuben's Roi de Lair (9st 5lbs) B. Rosen 3

Mr. W. D. Fernando's Gazalan (9st 2lbs) O'Brien 4

Won by a neck; a short head. Time—1min. 56 secs.

Lawyers Cup. Distance 1 mile.—

Mr. Douglas' Wontblong (7st) Ward .. 1

Mr. W. D. Fernando's Plactoi (7st 8lbs) Spackman 2

Mr. R. Alford's Understudy (8st 6lbs) McLouglin 3

Mr. Koos' Slippery John (7st 8lbs) B. Rosen 4

Won by ½ length; 2 lengths. Time—1min. 42 1-5 secs.

Roberts Cup. Distance 1 mile—

Mr. A. E. Ephraum's Adwan (9st 6lbs) Shatwell 1

Mr. Felix's Nashat Beg (7st 5 lbs) Corkil .. 2

Mr. R. Brough's Pervis (7st 1lb) White .. 3
Mr. Douglas' Manik (6st 13lbs) Ward .. 4
Won by 2 lengths; 1 length. Time—1min. 52 2—secs.

Governor's Cup. Distance 1 mile 3 furlongs—
Mr. Annandale's Night Jar, O'Brien } Dead heat 1
Mr. A. E. Ephraum's Jingle, Shatwell .. .. } Dead heat 1
Mr. DeSoysa's Jarney, Easton 3
Mr. G. Fellow's Willow Stream, Broughton .. 4
Won by 3 lengths. Time.—2 mins. 23 1-5 secs.

Civil Service Cup.—Distance 7 furlongs.—
Mr. L. F. Desoysa's Miss Mount (8st 3lbs) Spackman 1
Mr. A. E. De Silva's Louvello (7st 7lbs) Williams 2
Mr. A. E. DeSilva's Lippia (7st 7lbs) Mr. Flynn 3
Mr. Fred Abeysundera's Mistress Murphy (7st 6lbs.) Corkill 4
Won by ½ length. Time.—1 min. 28 4-5secs.

Galle Cup. Distance 1½ miles.—
Mr. J. G. Abeydeera's Sahluma (8st 6lbs) O'Brien 1
Mr. A. D. Callender's Arthur's Choice (7st 2lbs) Wright 2
Mr. R. Alford' Understudy (8st 7lbs) McLoughlin 3
Mr. W. D. Fernando's Kieff (7st 7lbs) Spackman 4
Won by a short head, 1 length. Time —2 mins. 37 4-5 secs.

Havelock Cup. Distance 1 mile, 3 furlongs.—
Mr. Felix's Titusoates (7st 11lbs) J. Flynn .. 1
Mr. Leslie's Semiramis (7st 5lbs) Ward .. 2
Mr. Fred Abesundera's Incomplete (8st 12 lbs) Read 3
Mr. Woodpecker's Lord Tanner (7st 6 lbs) Wright 4
Won by ½ length. Time—2 mins. 26 2-5 secs.

Colombo Cup. Distance 2 miles—
Mr. S. F. H. Perera's Steering Clear (8st 9 lbs) Harrison 1
Mr. Douglas's Pomfeins (7st 6lbs) Ward .. 2
Mrs. H. M. Lintott's Lemson (9st 4lbs) Williams 3
Mr. Fred. Abesundera's Old Bronze (8st 2 lbs.) Read 4
Won by a head. Time—3 mins. 40 1-5 secs.

Schofield Cup. Distance 1 mile.—
Mr. A. E. Ephraum's Artist Rifles (10st) Moon 1
Mr. Fred Abeysundera's Incomplete (11st 8lbs) V. C. Baker 2
Mrs. G. Smiths Enamour (11st 10lbs) Barnes 3
Mr. Woodecker's Lord Tanner (10st 8lbs) Jayatilleke 4
Won by 2½ lengths, 1½ lengths. Time—1min. 49 2-5secs.

Manning Cup. Distance 1 mile.—
Mr. A. E. Ephraum's Naughty Boy (8st 7lbs) Williams 1
Mr. G. Fellows' Happy Life (6st 12lbs) Spackman 2
Mr. R. Alford's Understudy (7st) Ward .. 3
Mr. A. Alford's Tintagel (7st 3lbs) McLoughlin 4
Won by 1 length, short head. Time — 1min. 44 4-5 secs.

Dacca.

Governor's Cup. Distance 6½ furlongs.—
Mr. B. R. Nundy's Lal Mohan (6st 7 lbs) Ambar Ali 1
Messrs. Dn. and Sn. Sircar's Rambler (8st 1lb) B. Chakrabarty 2
Mr. Megu's Fairie Boy (7st 13 lbs) Mohendra. 3
Won by ½ length, a neck. Time—1 min. 46 secs.

Kumar Ram Narayan Cup. Distance 1 mile—
Mr. Fraser Mitchell's Launch (8st 12lbs) Syed Ali 1
Khajeh Nazimuddin Cie's Cymbline (8st 13 lbs) Rostom Khan 2
Mr. Saman Meah's Dalkester (8st 12 lbs) Isafar 3
Mr. Maizuddin's Radium (8st 3lbs) Azmuatulla 4
Won by ½ length. Time.—2 mins. 20 secs.

Darjeeling.

The Railway Cup. Distance 4 laps.—
Mr. Topgay Sirdar's Langbo 1
Mr. Tsering Naspati's Grey Ball 2
Maharaja Kumari Chonie's Living 3

Won by a neck. Time— 2 mins 37 1-5 secs.

The Teesta Cup. Distance 3 laps.—
Mr. E. J. Kingsley's Hill Star 1
Mr. E. J. Kingsley's Union Jack 2
H. E. the Governor's Staff's Grey Hero .. 3
Won by a short head. Time—1min. 56 2-5 secs.

The Dewar Cup.—Distance 3 laps.—
Mr. Lakpatsering's Young Singhi 1
Mr. Omrao Miahe's Timber 2
H. E. the Governor's Staff's Grey Friar .. 3
Won by ½ length. Time—1 min. 55 secs.

Karachi.

Cutler Palmer Cup. Distance 2 miles.—
A. J. Fenwick's East Hendred (10st. 6 lbs.), Sowar Sundersingh 1
Colonel B. N. Abbay's Selected (12st.), Fenwick 2
Mr. C G. Holt Wilson's Teeny (10st, 9 lbs)., Owner 3
Won by 1 length; ½ length. Time—4 mins. 7 3-5 secs.

P. W. D. Cup. Distance 1 mile.—
Captain I. S. Nalwa's Weed Killer (9st. 10lbs.), Capt Jerrom 1
H. H. Khan of Kelat's Tannenberg (10st. 7lbs.), Khan Beg 2
H. H. Khan of Kelat's Parisian (9st. 4lbs.), Feroze Khan 3
Won by ½ length, 1 length. Time—1 min. 47 3—S seers.

The Dewar Cup. Distance 1 mile.—
Mr. Fazalpeera's Gregory (7st. 9lbs.), Mehar 1
Mr. Fazal Peera's Elser (9st, 6lbs.), Alibux 2
Mr. G. N. Lawrence's Injamma (8st.), Macarthur 3
Major O'Farrel's Sum Total (8st. 2lbs.), Owner 4
Won by 1½ lengths; 4 lengths. Time —1 min. 46 secs .

Kolhapur.

Shri Youvraj of Dewas Cup. Distance 1 mile.—
Mr. Khadavi Rehman's Orange Prince (7st. 12lbs), H. McQuade 1
Mr. A. R. Talib's Weldon (9st. 2lbs.), Ahmed Ali 2
Mr. Ardeshir and Aga Cumeralli's Shapoor (7st. 13lbs.), Khalil 3
Mr. Ayab Asad's Thamar (7st. 5lbs.), C. Hoyt 4
Won by 1½ lengths; 2 lengths. Time.—1min. 53 4-5 secs.

Shri Aaisaheb Maharaj Cup. Distance 1¼ miles.—
Mr. McElligot's De Souza (7st. 12lbs. carried 7st. 13lbs.), Thompson 1
Mr. M. Talib's Sayyad (7st.), Rosen .. 2
Mr. T. Harrison's Maharaja (7st. 9lbs.), Ashwood 3
Mr. Dadabhoy's Najmah (7st. 11lbs.), Meekings 4
Won by 1 length; the same; ¾ lengths. Time.—2 mins. 25 secs.

Shri Shahu Maharaja Memorial Plate. Distance 1¼ miles.—
Mr. M. C. Patel's Jovial William (9st.), Perkins 1
Messrs. Souter and Simpson's Fulfil (9st.), C. Hoyt 2
Mr. H. Ismail's Italian Poet (8st. 10lbs.), Ashwood 3
Won by 2½ lengths; 1½ lengths. Time.—2 min. 12 secs.

Sir Leslie Wilson Cup. Distance R. C. and 5 furlongs.—
Mr. Daver's Zoolfakar (8st. 2lbs.), T. Hill 1
S. S. Akkasaheb Maharaja's White Cross (9st. 1lb.), Perkins 2
Mr. Mc Elligott's De Souza (8st. 12lbs.), Thompson 3
Mr. Sheriff Ahim's President (7st. 10lbs.), Bullock 4
Won by 3 lengths; ½ length; 1½ lengths. Time.—3 mins. 36 2-5 secs.

S. S. Akkasaheb Maharaj Cup. Distance 1½ miles.—
Mrs. Dey's Authority (8st 11lbs). E. Ringstead 1
H. H. the Dowager Maharani of Kolhapur's Shewanti (7st. 5lbs. carried 7st. 7lbs.) L. Clarke 2
H. H. the Dowager Maharana of Kolhapur's Shivaprasad (9st. 2lbs.), Barnett.. .. 3
Won by a neck; 3 lengths. Time.—2 mins. 16 2-5 secs.

Maharaja Cup. Distance 1½ miles.—
Mr. Dey's Fanos (8st.), E. Ringstead .. 1

Messrs. Heath and Bird's Meena (7st. 4lbs.), L. Clarke 2

H. H. the Dowager Maharani of Kolhapur's Shahu Prasad (7st. 2lbs.), Rankin .. 3

Won by ¾ length; neck. Time.—2 mins. 11 secs.

W. I. T. C. Plate. Distance 6 furlongs.—

H. H. the Dowager Maharani of Kolhapur's Quarryman II (7st. 1lb.), Rankin .. 1

Mr. Patel's Theona (8st. 2lbs.), Howell .. 2

H. H. Dowager Maharani of Kolhapur's Lady Junior (9st.), Barnett 3

Won by 1 length; 1½ lengths. Time.—1 min. 16 1-5 secs.

Shri Vijayamala Maharani Cup. Distance 1½ miles.—

Mr. T. Harrison's Maharaja (9st. 5lbs.), Frost.. 1

Messrs. Gazala and M. Jamoor's Nassim (8st. 8lbs.), T. Hill 2

Mr. Talib's Sayyad (8st. 10lbs.), Howell .. 3

Mr. Ardeshir and Aga Cumberally's Shapoor (8st.), Khalil 4

Won by a neck; 1½ lengths; neck. Time.—2 mins. 24 secs.

Lahore.

Woodward Cup. Distance 1 mile.—

Raja Sripal Singh's Sicab (9st. 12lbs.), Purtoo Singh 1

Mr. Ram Dass' Mutloob (7st. 10lbs.), Tymon 2

Capt. W. H. K. Kerr's Kohinoor (9st. 4 lbs.), Capt. Bernard 3

Won by half a length; 4 lengths. Time. —2 mins. 4-5 secs.

"C. and M. G." Cup. Distance 6 furlongs.—

Major S. O'Donel's Fillet (9st. 12lbs.), Wanoborough Jones 1

Lt.-Col. W. B. White's Chinese White (8st. 7lbs.), O'Neale 2

Lt.-Col. G. Conder's Blither (9st. 5lbs.), W. Alford 3

Won by a short head, 1½ lengths. Time.—1 min. 20 3-5 secs.

New Year Chase. Distance 2½ miles.—

Mr. H. N. Weber's Glaxo (10st. 3lbs.), Capt. Branfoot 1

Capt. W. M. Newill's Sammy (9st. 12lbs.), Mr. Baker 2

Mr. H. N. Weber's Ben Aden (10st. 4lbs.), Capt. O'Hara 3

Won by 20 lengths; 20 lengths. Time.—5 mins. 50 secs.

Punjab Commission Cup. Distance 1¼ miles.—

Mrs. C. M. Stewart's Winston (7st. 13lbs.), Purtoo Singh 1

H. H. the Khan of Kelat's Nigel (9st. 12lbs.), Capt. Bernard 2

Mrs. Hildyard's Little King (7st. 5lbs.), Japheth 3

Won by 1½ lengths; 4 lengths; Time. —2 mins. 23 1-5 secs.

Merchants' Cup. Distance 6 furlongs.—

Mr. Rossco's Whitsun (9st. 12lbs.), Capt. Bernard 1

Major Dvanreman and F. Weschedart's Balkan Princess (9st.), Bunnetta .. 2

Lt.-Col. A. G. Puech and Mr. J. Thompson's La Mienne (7st. 13lbs.), Japheth .. 3

Won by 1¾ lengths; 1¾ lengths; 1¾ lengths. Time.—1 min. 22 secs.

Shalimar Cup. Distance 7 furlongs.—

Capt. J. A. Aizlewood's Joe D. (9st.), O'Neale .. ..

Capt. C. B. Farrar's Poor Box (8st. 9lbs.), Barrett .. ..

Mr. M. G. Weschedart's Carton Pierre (9st. 12lbs.), Capt. Freer 3

Won by 1½ lengths; 5 lengths. Time.—1 min. 33 4-5secs.

Lahore Produce Cup. Distance 6 furlongs.—

Mr. J. K. Bose's Cocoon (9st. 1lb.) Tymon 1

Mr. W. Buckley's Allanah (8st. 3lbs.), McDonald 2

H. H. the Maharaja of Kashmir's Political (9st. 1lb.), Barrett .. ..

The Begum of Mamdot's Helios (8st. 3lbs), J. O'Neale 4

Won by 1½ lengths; ½ length; a head Time.—1 min. 18 1-3 secs.

Stewards Cup. Distance 1 mile.—

Maj. S. Oduel's Fillet (9st. 5lbs.), Ramchunder 1

H. H. the Maharaja of Kashmir's All's Well (9st. 10lbs.), Barrett.. 2

Mrs. G. Dudley Mathew's One Guinea (9st. 1lb.). Capt. Bernard 3

Capts. M. Cox and M. George's Charles Allix (9st. 2lbs.), W. Alford 4

Won by a neck; a head; 1 length. Time.
—1 min. 45 secs.

Punjab Cup. Distance 1 mile.—
Mr. N. White's Woodland Nun (8st. 13lbs.), Barrett 1
Mr. Fateh Mohd.'s Eastern Maid (8st. 7lbs.) E. Fownes 2
Messrs. W. Taylor and H. D. Craik's June Bride (8st. 13lbs.), M. O'Neale 3
Capt. E. J. Austin's Goodwood II (9st. 3lbs.), Capt. Wanborough Jones .. 4
Won by 3 lengths; 3 lengths; 2 lengths. Time.—1 min. 45 secs.

Lucknow.

Civil Service Cup. Distance 7 furlongs.—
Mr. A. C. Cardeshire's Sunnyville (7st. 13lbs. carried 8st.), Hutchins 1
Mr. H. K. Dey's Sir Stingo (8st. 12lbs.), Ringstead 2
Mr. F. Mackinnon's Gainstown, Northmore 3
Mr. H. K. Dey's Rosemeer (7st. 5lbs.), Japeth 4
Won by neck; 1½ lengths; ½ length. Time.—1 min. 30 4-5 secs.

Hardcourt Butler Cup. Distance 5 furlongs.—
H. H. the Maharaja of Kashmir's All's Well (9st. 10lbs.), H. Walker 1
Mr. H. K. Dey's Authority (9st. 4lbs.), Ringstead 2
Major Vanrennen's Winfree (10st. 7lbs.), Edwards 3
Capt. G. O'Harra's Manor (7st. 11lbs. carried 7st. 12lbs.), Northmore 4
Won by 1½ lengths; 1 length; 1 length. Time.—1 min. 3 secs.

Punchestown Chase. Distance 2 miles.—
Capt. E. K. Bowe's Light Sail (10st.), L. Singh 1
Capt. P. J. Hilliard's Kelly (10st. 1lb.), Capt. Wansborough Jones 2
R. C. Polard's Folly II (11st. 4lbs.), Owner 3
Won by 7 lengths; ½ length.

Fownes Cup. Distance 1¼ miles.—
Raja of Nazargunj's Wilmington (9st. 8lbs.), Edwards 1
Major D. Vanrennen's Prince Michael (7st. 6lbs), Bunnett 2
J. D. Scott's Bluster (7st. 13lbs.), Parker 3
Major T. Burridge's Work of Art (9st. 6lbs.), Riley.. 4
Won by ¾ length; short head. Time.—2 mins. 1-6secs.

Governor's Cup. Distance 5 furlongs.—
Mr. A. C. Ardeshir's Sunnyhill (8st. 4lbs.), Hutchins 1
Messrs. Burn and Holme's Johnston's Mooning (8st. 13lbs.), Edwards 2
Mrs. J. Mein Austin's Thundering Legion (9st. 1lb.), Marland.. 3
Mrs. J. Mein Austin's Last House (8st. 5lbs.), Parker 4
Won by 2½ lengths; ½ length and length. Time.—1 min. 21-4 secs.

Jehangirabad Cup. Distance 7 furlongs.—
Major Vanrennen's Winfree (10st. 4lbs.), Edwards 1
Rai Sripal Singh and R. P. Shukla's Kamala (7st. 10lbs.), Japheth 2
Hon'ble R. Gujadhar's Libellule (7st. 7lbs.), O'neal 3
Mrs. A. J. Burns' Allegory (10st. 8lbs.), G. Thompson 4
Won by ¾ length, short head; and short head.

Army Cup. Distance 7 furlongs.—
Major S. O'Donel's Fillet (11st. 12lbs.) Capt. Cox 1
Major W. B. Rennie's Brown Ash (11st 12lbs), Capt. Atherton .. } Dead heat 2
Capt. S. A. Sanford's Warrior Belle (10st 3lbs.), Capt. Adams } Dead heat 2
Capt. D. A. Gibbon's Weed Killer (10st. 6lbs.), Major Thwaytes .. 4
Won by 1 length; dead-heat; 2 lengths. Time—1 min. 32 3-5 secs.

Stewards Cup. Distance 1 mile, 1 furlong.—
Raja of Nazargunj's Wilmington (9st. 5lbs.) Edwards 1
Major T. F. S. Burridge's Work of Art (9st. 9lbs) Boxburgh 2
H. H. Maharajah of Kashmir's Liza (7st.) Ralford 3
Capts. Cox and R. George's Charles Allix (9st. 4lbs.), J. O'Neale 4
Won by a short head; 3 lengths; 4½ lengths. Time.—1 min. 58 3-5 secs.

Madras.

asulipatam Cup (Div. I). Distance 5 furlongs—

Mrs. Kirwan's Mayfly (8st. 2lbs.), Burgess 1
H. H. The Maharaja of Kolhapur's Benares (8st. 13lbs.), Clarke 2
H. H. The Maharaja of Mysore's Scimitar (9st.), Hill 3
H. H. The Maharaja of Kolhapur's Nayif Pasha (8st. 5lbs.), H. Black 4
Won by a short head ; a head ; a short head. Time.—1 min. 8 2-3 secs.

asulipatam Cup. (Div. II.)—
Mr. Sheth's Ashroff (7st. 10lbs.), Jones .. 1
Mr. Squire's Hajlan (8st. 3lbs.), S. Black.. 2
Maharaja of Kolhapur's Crossword (8st. 3lbs.), Clarke 3
Mr. Murphy's Baloz (8st. 2lbs.), Harding .. 4
Won by ¾ length; neck; short head. Time.—1 min. 9 3/5 secs.

ive Plate. Distance 6 furlongs—
Mr. Roger's Dinnette's Daughter (8st. 13lbs.), S. Black 1
Mr. Murphy's Santarg (8st. 7lbs.), Fox .. 2
Hajee Ismail Sait's Flintham (9st.), Forbes 3
Maharaja of Mysore's Chinese Honeymoon (8st. 12lbs.), Hill 4
Won by a neck ; 1 length ; 1 length. Time.— 1 min. 15 ½ secs.

overnor's Cup. Race Course and distance.—
The Maharaja of Kolhapur's Poet's Dream (9st.), Clarke 1
The Maharaja of Venkatagiri's Red Cockade (7st. 13lbs.), H. Black 2
The Maharaja of Venkatagiri's Recompense (8st. 5lbs.), S. Black 3
Mrs. Kerman's Lent Love (8st. 1lb.) Sieley 4
Won by a neck ; a head ; ¾ length. Time—2 mins. 48 3-5 secs.

Ceylon Cup. Distance 1 mile.—
The Maharaja of Kolhapur's Fireaway (7st. 11lbs.), Clarke 1
Sir Ismail Sait's Peg Anthony (7st. 6lbs.), Barber 2
Mr. Murphy's Last Word (9st. 3lbs.), Hardinge.. 3
Mr. Venkatanarayan Rao's Floral Dance (9st.), Duckenfield 4
Won by 3 lengths ; ½ length ; ¾ length. Time.—1 min. 43 2-5 secs.

Mysore Cup. Distance 1 mile.—
Mr. Murphy's Drummer-Boy (9st. 12lbs.), Hardinge 1
Messrs. Essajee and Bird's Naughty Girl (9st. 5lbs.), Duckenfield 2
Maharaja of Kolhapur's Praying (7st. 10lbs.) Clarke 3
Mr. Kamte's Medina (7st.), Barber .. 4
Won by a neck ; 1¼ length ; neck. Time.— 2 min. 44 secs.

Bobbili Cup. Distance 1 mile.—
H. H. The Maharaja of Mysore's Scimitar (8st. 13lbs.), Hill 1
Mr. Mohamed Jaffer's Palavi (8st. 11lbs), Fox 2
H. H. The Maharaja of Kolhapur's Shahzaman (7st. 11lbs.), Clarke 3
Mr. Abdulla Mana's Sannam (9st. 3lbs.), S. Black 4
Won by 1½ lengths ; short head; 2 lengths. Time—1 min. 52 2-5 secs.

Kirlambudi Cup. Distance 5 furlongs—
Maharaja of Mysore's Chinese Honeymoon (7st. 13lbs.), Hill 1
Sir Ismail Sait's Flintham (8st. 3lbs.), Forbes 2
Mr. Sheldrake's Luxmi (7st. 12lbs.), Sieley 3
Mr. Murphy's Santag (8st.), Hardinge .. 4
Won by a head ; ½ length ; a head. Time.— 1 min. 1 2-5 secs.

Merchants Cup. Distance 1 mile, 1 furlong.—
Mr. Murphy's Platinum (7st. 7lbs.), Hardinge.. 1
Sir Willson's Ethelwinjas (8st. 9lbs.), Fox 2
H. H. The Maharaja of Venkatagiri's Red Cockade (8st. 10lbs.), S. Black. .. 3
H. H. The Maharaja of Venkatagiri's Recompense (8st. 10lbs.) Harrison .. 4.
Won by 1½ lengths; ½ length. Time.— 1 min 54 secs.

Cochin Cup. Distance 1½ miles.—
Mr. Venkatanarayana Rao's Mameluke (9st.), Duckenfield 1
Mr. Chubildas Aasuf (8st. 13lbs.), Clarke .. 2
Mr. Mahomed Jaffar's Palavi (8st. 9lbs.), Hardinge 3
Mr. Mahomed Jaffer's Tabriz (7st. 7lbs.), Fox 4
Won by 1½ lengths ; 2 lengths. Time.—2 mins. 52 secs.

Maharani Venkatagiri Cup. Distance 1 mile, 1 furlong—

Mr. Murphy's Drummer-Boy (10st.), Hardinge 1

Mr. Kamte's Medina (7st. 2lbs.), Siely .. 2

Raja Sivaganga's Criadillo (7st.), S. Black .. 3

Maharaja of Kolhapur's Prayag (7st. 5lbs.), Clarke 4

Won by ¾ length; 1½ length; 1 length. Time—1 min. 58 4-5 secs.

The Paralakimidi Cup. Distance 1¼ mile.—

Mr. Mahomed Jaffar's Palavi (8st. 6lbs.), Burgess 1

Mr. Chubildas's Aasuf (9st.), Clarke 2

Mr. Murphy's Auhni (7st. 8lbs.), Hardinge .. 3

Mr. Mahomed Jaffar's Tabriz (7st. 5lbs.), Fox 4

Won by ½ length, ½ length; short head. Time—1 min. 43 secs.

The Yendayar Cup. Distance 1¼ mile.—

Mr. Jenkins' Coster Boy (8st. 2lbs.), Barber. 1

Nawab Mir Mahdi Ali Khan's San Fay (9st. 3lbs.) Beasley 2

Maharaja of Kolhapur's Fireaway (7st. 6lbs.) Clarke 3

Mr. Murphy's Platinum (9st. 4lbs.), Hardinge 4

Won by ½ length; ½ length; 1½ length. Time.—2 mins. 8 4-5 secs.

Venkatagiri Cup.—Distance 6 furlongs:—

Mr. Haramy's Mohan (7st. 4lbs.) H. Black .. 1

Mr. Chavan's Palavi (7st. 8lbs.) Siely .. 2

Nawab Mir Mahdi Ali Khan's Koko (7st. 3lbs.), Read 3

Mr. Murphy's China (7st. 8lbs.), S. Black .. 4

Won by a neck. Time—1 min. 24 secs.

Trades' Cup.—Distance 1 mile.—

Rajah of Parlakimidi's Dawn of Hope (9st. 6lbs.) Serby 1

Mr. Murphy's Last Word (8st. 9lbs.), S. Black 2

Nawab Mahdi Ali Khan's Gold Currency (7st. 2lbs. carried 7st. 3lbs.), Read .. 3

Mrs. Clarke's Brown Bread (10st) Forsyth .. 4

Won by 3½ lengths, 2 lengths, 3 lengths. Time.—1min. 53 3-5secs.

Meerut.

Garden House Cup. Distance about 2½ miles over chase course.—

Capt. E. Creagh's Nethersole (11st. 12lbs.), Owner 1

Capt. W. Newills' Sammy (12st. 7lbs.), Owner 2

Won by a length. Time.—5mins. 51 3-5 secs.

Governor-General's Cup. Distance 1¼ mile.—

H. H. the Maharaja of Kashmir's All's Well (10st. 12lbs.), Walker 1

Mr. S. Gurbaksh Singh's Perception (8st. 12lbs.), Fownes 2

H. H. the Khan of Khait's Parisian (8st. 6lbs.), Capt. Bernard 3

Mr. R. Muir's Mulberry (7st. 12lbs.), Barrett 4

Won by 2 lengths; 1 length; a head. Time.—2mins. 12-25 secs.

B. N. Bhargava Cup. Distance 1¼ mile.—

Flight Officers Robert and A. Holmes's Cock Robin (8st. 9lbs), Box-Roxborough. 1

Mr. S. Diyal Singh's Chhachhis Fortune (7st.), Japeth 2

Mr. Akbar Ali's Malcom (7st. 7lbs. car. 7st. 8lbs.), Bonnetta 3

Raja Sripal Singh's Sicab, (9st. 12 lbs.), Ritchie 4

Won by 1 length, half a length, a neck. Time.—2 mins. 24 3-5 secs.

Governor's Cup. Distance about 2 miles.—

Capt. C. W. White's Kadir II. (10st. 10lbs. car. 1st. 6lbs.), Mr. Bland 1

Mr. Rossco's Queen of Kilcash (12st. 10lbs.), Mr. Tudor 2

Capt. P. J. Hilliard's Kelly (10st. 10lbs. car. 10st. 11lbs.), Mr. Colchester 3

Capt. W. Nevill's Sammy (12st. 10lbs.), Owner 4

Won by 6 lengths; 3 lengths.

Mysore.

Rajkumar Cup. Distance about 1 mile.—

His Highness the Maharaja of Mysore's True Grace (7st. 13lbs.), Hill 1

The Raja of Parlakimidi's Roitoi (8st. 11lbs.), Rylands 2

Mr. M. C. Patel's Blyth Bachelor (9st. 12lbs.), Howell 3

Mr. Essaji's Jovial (7st. 6lbs.), Stokes .. 4

Won by a neck; 1½ length; head Time.—1min. 44secs.

Ootacamund.

Governor's Cup. Distance 1¼ miles—

Raja of Parlakimidi's Roitoi (8st. 6lbs.) Rylands 1

Mr. Murphy's Brave Queen (7st. 5lbs.), J. Rosen 2

Mr. Venkatnarayana's Dara's Gift (7st.), H. McQuade 3

Mr. E. C. Kent's Kirudance (8st. 5lbs), C. Hoyt 4

Won by 8 lengths; ½ length; 2 lengths. Time—2 mins. 14 1-5 secs.

Deomar Cup. Distance 7 furlongs—

Lt.-Col. R. C. R. Hill's Samarmad (8st. 6lbs.), Hoyt 1

Mr. Abdulla Mana's Josimos (8st. 9lbs), H. McQuade 2

Mr. A. R. Taha's Ashroff (7st. 4lbs.), Meekings 3

Mr. Venkatnarayana's Mameluke (9st. 6lbs), Hill 4

Won by a head; short head; 1 length. Time.—1 min. 44 secs.

Yendayar Cup. Distance 7 furlongs—

Messrs. Maurice and Wright's Bacchante (7st. 9 lbs.), Aldridge 1

Mr. J. J. Murphy's Ravens Ait (9st. 3lbs), Meekings 2

Rajah Parlakimidi's Stickfast (7st. 11lbs.), Rylands 3

Raja Sivaganga's China Marcus (8st. 13lbs.), Edwards 4

Won by 2 lengths. Time—1 min. 34 4-5secs.

Haji Sir Ismail Sait's Cup. Distance 6 furlongs—

Mr. Abdulla Mana's Jossimos (8st. 4 lbs.), McQuade 1

Mr. Mahomed Burgash's Good Gold (7st. 13 lbs), Hoyt 2

Mr. Mahomed Omer's Agent (7st. 6lbs.), Rosen 3

Mr. Ardeshir's Najmuzzaman (7st. 11lbs.), Siely 4

Won by a short head. Time—1 min. 27 1-5 secs.

Poona.

The Atlantic Stakes. Distance 1¼ mile.—

Mr. L. H. Hewitt's Coster Boy (8st. 12lbs.), J. W. Brace 1

Mr. C. N. Wadia's Coq-a L'ane (8st. 12lbs.), Hutchins 2

H. H. the Thakore Sahib of Wadhwan and Lt.-Col. Zorawar Singh's Sparks, (9st. 1 lb), Forbes 3

H. H. the Aga Khan's Halim (7st. 10lbs.) Stokes 4

Won by a neck; 1½ lengths; 1 length. Time—2 mins. 10 secs.

The Aga Shamshudin Plate. Distance 7 furlongs.—

Mr. J. C. Galstaun's Golden Quest (8st), Northmore 1

Messrs. Heath and W. Bird's Atreas (9st. 2lbs.), A. C. Walker 2

Mr. A. Geddis' My Lord (8st. 6lbs.) A. Clarke 3

H. H. the Maharaja of Mysore's Affable (8st. 2lbs.), T. Hill 4

Won by neck; short head; neck. Time—1 min. 27 3-5 secs.

The Western India Stakes. Distance 1¼ mile.—

Mr. L. H. Hewitt's Coster Boy (8st. 3lbs.), Brace 1

H. H. the Maharaja of Rajpipla's Gift O' The Glen. (8st. 2lbs.), Townsend .. 2

Mr. A. M. Irani's French Briar (7 st. 13lbs.), car. 8 st.), W. Ashwood 3

Mr. H. M. Thaddeus' Aborigine (8st. 6 lbs.), A. Clarke 4

Won by 1½ length; ½ length; 1½ length. Time.—2 mins. 6 secs.

The Newmarket Plate. Distance 6 furlongs.—

H. H. the Maharaja of Mysore's Affable (8st. 6 lbs.), T. Hill 1

Mr. Shantidas Askuran's Vesington Planet (7st. 13lbs.) Burn 2

Mr. V. Rosenthal's Wooer (8st. 10lbs.), Hutchins 3

H. H. Aga Khan's Darial II (9st. 12lbs.), A. C. Walker 4

Won by head; 2 lengths; 2½ lengths. Time—1 min. 12 4-5 secs.

The Stewards' Cup. Distance 1½ miles—

S. S. Akkasaheb Maharaja's Roman (7st.) Rankin .. .. } Dead heat 1

Messrs. Heath and W. Bird's Royal (8st. 2 lbs.) Ashwood .. } Dead heat 1

Mr. M. C. Patel's Amar (9st. 3 lbs.) Howell. 3

Mr. S. N. Zodge's Ahyid (8st. 3 lbs.) Diab . 4

Won by dead heat; 2 lengths; short head Time.—2 mins. 51 2-5 secs.

The Governor's Cup. Distance R. C. and distance—

H. H. the Maharaja of Kolhapur's Cheerful (7st. 9 lbs.), Clarke 1

Mr. K. A. Hilay's Taimurlung (7st. 3 lbs., car. 7st. 6 lbs.), Hardinge 2

Mr. A. M. Khairaz's Rehearsal (7st. 5 lbs. car. 7 st. 7 lbs.), Thompson 3

Mr. Akbarali and Seth Kimatrai's Lucky Star (9st. 5 lbs.), Perkins 4

Won by neck ; head ; head. Time.—3 mins. 17 secs.

The Fitzroy Plate. Distance 1 mile—

Messrs. Heath and W. Bird's Atreas (8st. 5 lbs.), A. C. Walker 1

Mr. C. N. Wadia's Free From Care (7st. 10 lbs car. 7st. 12 lbs.), Hutchins .. 2

Mr. A. M. Irani's French Briar (8st. lbs), Hardinge 3

Mr. J. C. Galstaun's Ox Trot (7st. 4 lbs.) Stokes 4

Won by 2 lengths ; ½ lengths ; ¾ length. Time.—1 min. 49 3-5 secs.

Mr. C. N. Wadia's Coq-A L'ane (8st. 13 lbs.), Hutchins 1

H. H. the Aga Khan's Eastern Bloom (7st. 7 lbs.). A. C. Walker 2

Mr. Kelso's Tusculum (8st. 3 lbs), Hardinge 3

H. H. the Maharaja of Kolhapur's Vijaya-kumar (8st. 2 lbs). A. Clarke 4

Won by ½ length ; ¾ length ; 2 lengths. Time.—1 min. 28 2-5 secs.

The Trial Plate · Distance 1 mile—

H. H. the Aga Khan's Darial II (9 st. 2 lbs.) Barnett 1

Mr. A. Geddis' My Lord (8st. 7 lbs.) Burn. . 2

H. H. the Aga Khan's Mario (7st. 8 lbs.) A. C. Walker 3

Mr. C. N. Wadia's Cap-a-Pie (9st. 7lbs.) Hutchins 4

Won by 1 length ; 1½ length ; half length. Time.—1 min. 42 2-5 secs.

The Dealers' New Plate. Distance 1¾ mile—

Messrs. E. H. Ghazala and Mahomed Jamoor's Radha'a (7st. 2 lbs), Japeth. . 1

Mr. A. R. Taha's Sheema (9st. 3 lbs.), Howell 2

Mr S B. Contractor's Subram (8st. 4 lbs), W. G. Thompson 3

Mr. A. M. J. Talib's Gooliab (8st. 13 lbs.), Barnett .. .. 4.

Won by 2 lengths, 3 lengths, 3 lengths. Time.—2 mins. 23 2-5 secs.

H. H. The First Aga Khan's Commemoration Plate. Distance 1¼ mile.—

Mr. A. R. Taha's Sheema (8st. 6 lbs. Howell.

Mr. Khadavi A. Rehman's Red Prince (9st.), H. McQuade .. ..

Messrs. E. H. Ghazala and Mahomed Jammor's Radha'a (6st. 13 lbs.), Japheth 3

Mr. R. H. Gahagan's Noman (8st. 7 lbs.), Brace 4

Won by head ; 4 lengths ; 1½ lengths. Time.—2 mins. 31 2-5 secs.

The Aga Khan's Cup. Distance 1½ mile.—

Mr. C. N. Wadia's Cap-a-Pie (9st. 7 lbs.), Hutchins 1

Mr. Shantidas Askuran's Bell's Hill (8st. 3 lbs.), Burn 2

H. H. the Maharaja of Kolhapur's Precious (8st. 4 lbs.), A. Clarke 3

Mr. Kelso's Casino (8st. 3 lbs.), Hardinge .. 4

Won by 2½ lengths ; 3 lengths ; 4 lengths. Time.—2 mins. 42 secs.

The Poona Plate. Distance 6 furlongs—

Mr. C. N. Wadia's Cul-De-Sac (8st. 7 lbs.), Hutchins 1

Mr. Eve's Star of Italy (7st. 3 lbs.)Christie . 2

Mr. Kelso's Birdwood (8st. 4 lbs.). Hardinge 3

H. H. the Maharaja of Kolhapur's Golden Shower (late Clatter). (8st.), A Clarke .. 4

Won by 1 length ; ¾ lengths ; head. Time. —1 min. 17 4-5 secs.

The St. Leger Plate.—Distance—

Mr. Shantidas Askuran's Ian Ban (7st. 11lbs.), Burn 1

Mr. C. N. Wadia's Coq-a L'ane (8st. 1lb.), Hutchins 2

Mr. Kelso's Casino (7st. 7lbs.), Hardinge .. 3

Mr. L. H. Hewitt's Coster Boy (9st. 5lbs.), A. C. Walker 4

Won by neck ; neck ; 2 lengths. Time.—2 mins. 48 secs.

The Eclipse Plate.Distance.—6 furlongs.—

Mr. Pine's Puffin (7st. 3lbs.), Townsend .. 1

Mr. N. Begmahomed's Ardley (7st. 12lbs.) Howell 2

H. H. the Maharaja of Kolhapur's Shri Narayan (7st. 1lb.) Stokes 3

Mr. Kelso's Birdwood (6st. 12lbs.) Rankin 4

Won by ½ length ; neck ; 3 lengths. Time.— 1 min. 12 2-5secs

Rawalpindi.

Rawalpindi Gold Cup. Distance 7 furlongs—

Mrs. Sydney Smith's Philomel (9st. 3 lbs), Barrett 1

Capt. Clune's Mahaboor (7st. 4 lbs) .. 2

Mrs. Mylne's Lady Be Good (8st. 11 lbs.) Capt. Bernard and Col. Puech's and Thompson's La Mienne (8st. 7 lbs.), Roxburgh. } Dead Heat. 3

Won by 2½ lengths; 1½ length. Time.—1 min. 31 4-5 secs.

Will's Gold Flake Chase. Distance 2 miles—

Mr. Rowsco's Queen of Kilcash (12 st. 5 lbs.), Capt. Tudor.. 1

Mr. Maclachlan's Non-Co-operator (10 st. 10 lbs.) Owner, ... 2

Capt. Newill's Sammy (11st. 5 lbs). .. 3

Won by a head; 3 lengths. Time—4 mins. 5 2-5 secs.

Patron's Cup. Distance 1 mile—

Major Plunkett's Woodshift (8st. 5 lbs.), O'Neale 1

Major Vanrenen's Prince Michæl (11st. 11 lbs.), Edwards.. 2

Maharaja of Kashmir's Star Shell (7st. 11 lbs.) 3

Won by ¾ length; a head. Time.—1 min. 41 secs.

Ranala Cup. Distance 1¾ mile—

Major Vanrenen's Prince Michæl (11st. 10 lbs.), Capt. Tudor 1

Capt. O'Hara's Kilbogan (10st. 3lbs.), Owner 2

Major Davie's Rambler (10 st. 2 lbs.). Capt. Gamble 3

Won by a length. Time.—3 mins. 23 2-5 secs.

Northern Cup. Distance—Round the Course—

Mr. Khannas's Cock Robin (8st. 12 lbs.), Roxburgh 1

Mr. Diyal Singh's Fortune (7st.), O'Neale.. 2

Raja Sripal Singh's Sicab (10 st. 4 lbs.) Ritchie 3

Won by 2 lengths; a length. Time.—2 mins. 51 2-5 secs.

Rawalpindi Club Cup. Distance 6 furlongs.—

Capt. Clune's Mahaboob (7st 4 lbs.) Jepeth.. 1

H. H. the Maharaja of Kashmir's Micailsa (8st 12lbs) Walker.. 2

H. H. Khan of Kalat's Poli (7st) Ghisita .. 3

Won by 1½ length; a head. Time.—1 min. 18 3-5 secs.

The Punjab Army Cup Steeplechase. Distance 2½ miles.—

Capt. G. H. B. Wood's Warrior (12st. 10lbs), Mr. Wansworth Jones 1

Mr. B. M. Maclachlan's Non-Co-Operator, Owner 2

Capt. H. M. Day's Puffing Billy Major, Branford 3

Won by ⅗ length. Time—5 mins. 14-3 secs.

Moderate Cup. Distance 6 furlongs.—

Theresa (9st. 9 lbs.), Col. Mathews 1

Lorna (8st. 12 lbs.), McGowan 2

Allen (9st. 2lbs.), Akbar 3

Won by 1½ lengths, neck. Time—1 min. 22 4-5 secs.

Eve Cup. Distance 4 furlongs.—

Papillon (8st.), Miss Wadia 1

Gulab (10st.), Mrs. Turner 2

Won by six length . Time—56 secs.

Also ran: The Pig (Miss Noakes (9st. 7lbs).

Kashmir Cup. Distance about 1 mile 1 furlong.—

Capt. Arnold's Gretna Green (11st. 7lbs)., Mr. Weber 1

Mr. Bland's Tin Whistle (10st. 3lbs.), Capt. Newill 2

Capt. Cox's Langary Gate (10st. 12 lbs.), Capt. Jones 3

Won by a neck; ½ length. Time— 2 mins. 2 4-5 secs.

Amazons Cup. Distance 4 furlongs.—

Lorna (9st. 7 lbs.), Mrs. Noakes 1

Papollon (8st.), Miss Wadia 2

Eccleston (9st.), Mrs. Fennell 3

Won by 1½ length. Time—1 min. 1 1-5 secs.

Secunderabad.

Nizam's Cup. Distance 1 mile.—

Nawab Mir Mahdi Ali Khan's Gold Currency (8st. 6lbs.) O. Aldridge 1

Mr. E. Paulie's Record (9st. 1lbs.) 2

Mr. L. H. Hewitt's Headstrong (9st. 12lbs.), T. Hill 3

Won by 3 lengths; 3 lengths. Time—1 min. 44 4-5 secs.

Fakr-ul-Mulk-Cup. Distance 1 mile.—

Lt.-Col. R. C. R. Hill's Osbourne (8 st. 10 lbs.) T. Hill 1

Dr. M. Usmon's Noor Jehan (8st. 8lbs.) O. Aldridge 2

Mr. A. Hoyt's Prince Arthur (10st. 11lbs.) M. Hoyt 3

Won by 1 length, ½ length. Time— 1 min. 45 secs.

Salar Jung Cup. Distance 1 mile.—

Mr. Anwar Ali Beg's Blackberry (7st. 13lbs.), O. Aldridge 1

Mr. Keloo's Vari (8st. 5lbs.), J. Rosen .. 2

Mr. Mohamed Burgash's Good Gold (8st. 1lb.), W. G. Thompson 3

Won by a head; ½ length. Time—1 min. 53½ secs.

Peshkar Cup. Distance 7 furlongs.—

Maharaja Sir Kishen Pershad's Solidity (7st. 12 lbs.) W. G. Thompson 1

Mr. S. Mahalla's Tiffah (8st. 1lb.) T. Hill .. 2

Mr. G. Ardeshir's Nazimuzaman (8st. 5lbs.) N. E. Raymond 3

Won by a short head; 3 lengths. Time— 1 min. 38 3-5 secs.

Resident's Cup. Distance 5 furlongs.—

Nawab Mir Mahdi Ali Khan's Gold Currency (9st.) O. Aldridge 1

Mr. S. C. Wright's Tamara (8st. 7 lbs.) R. Stokes 2

Mr. L. H. Hewitt's Headstrong (9st. 12lbs.) L. Jones 3

Won by 3 lengths; short head. Time—1 min. 3 4-5 secs.

Salar Jung Cup (Div. II). Distance 1 mile.

Capt. O. L. Prior Palmer's Siegfried (9st. 4 lbs.) C. H. Perkins 1

Mr. A. R. Taha's Saturday (8st. 2lbs.) J. Rosen 2

Mr. Mohamed Burgash's Surhan II (8st. 2lbs.) W. G. Thompson 3

Won by 2 lengths; 1 length. Time—1 min. 54 secs.

ATHLETICS.

Calcutta: Amateur Championships—

The results of the Senior events are as follows:—

100 Yards:—P. K. Chatterjee.

High Jump:—Abu Yusuf. Height 5 ft. 6½ ins.

Long Jump:—Abu Yusuf. Distance 19 ft. 10 ⅜ ins.

120 Yards Hurdles:— K. H. K. Dutt. Time.—16 4-5 secs.

Half Mile:—B. N. Ghose. Time.—2 mins. 17 secs.

Pole Vault:—A. K. Sarkar. 9 ft. 7 1-8 secs.

Quarter Mile:—P. K. Chatterjee. Time.—55 secs.

Hardinge Challenge Shield for the best athlete was won by Abu Yusuf of the Indian Athletes Camp.

Calcutta: Inter University Meeting.—

The following are the results:—

One Mile won by S. Kongari (St. Xavier's), Time.—5 mins. 22 2-5 secs.

Long Jump won by J. Anthony (St. Xavier's). Distance 20 ft. 4½ ins.

Throwing the Cricket Ball won by E. Osborne (St. Xavier's). Distance 101 yards.

100 Yards won by J. Anthony (St. Xavier's). Time—10 2-5 secs.

Shot Putt won by H. Dass (Serampore College). 39 ft. 8 ins.

220 Yards won by J. Anthony (St. Xavier's). Time.—24 secs.

Pole Vault won by D. Choudhary (Scottish Churches). Height 9 ft. 6 ins.

Half Mile won by S. Kongari (St. Xaviers). Time.—2 mins. 19 3-5 secs.

High Jump won by Abu Yusuf (Law College). Height 5 ft. 7 ins.

Quarter Mile won by J. Anthony (St. Xavier's) Time.—55 2-5 secs.

120 Yards Hurdles won by D. B. King (St. Joseph's). Time 17 secs.

Two Miles Bicycle Race won by D. K. Sen (Law College). Time—5 mins. 37 3-5 secs.

Bombay: 10 Miles Walking Race (Buchanan Cup,—

The results were:—

1. R. G. Nair. 1hr. 38 mins. 19 secs.
2. W. Rawlings. 1 hr. 38 mins. 33 secs.
3. M. R. Aiyar. 1 hr. 40 mins. 15 secs.
4. P. Manikam. 1 hr. 40 mins. 19 secs.
5. D. Master. 1 hr. 42 mins. 9 secs.
6. P. G. Maitra. 1 hr. 46 mins. 34 secs.

Bombay. 10 Miles Walking Race (Buchanan Cup).—

The following were those who won awards:—

1. R. G. Nair. Time—1 hr. 35 mins. 52 secs.
2. M. R. A. Iyer, Time—1 hr. 37 mins. 44 secs.
3. W. Rawlings. Time—1 hr. 39 mins. 15 secs,
4. B. S. Bantwal, Time—1 hr. 40 mins, 25 secs.

5. M. S. Kowshik. Time—1hr. 44mins. 16 secs.
6. B. V. Diwadkar. Time—1 hr. 45 mins. 27 secs.

The following won time medals :—

M. R. Wadia, M. Variava, P. J. Maitra, Pte. H. Pickering, Aaron Elijah, L./Cpl. Morgan and Pte. F. Millett.

Bombay : 10 Miles Walking Race (Z. P. C; and H. League)—

The following Competitors completed the distance within the time-limit :—

1. Master D. R. Time—1 hr. 28 mins. 6$\frac{3}{4}$ secs.
2. Chinoy K. D. Time—1 hr. 33 mins. 3-2-5 secs.
3. Marker S. H. Time—1 hr. 41 mins. 2-5 secs.
4. Wadia M. R. Time—1 hr. 52. mins.

Bombay :— Z. P. C. League—

10 Miles Cycle Race—

The results were :—

1. Irani B. K., Time—6 hrs. 25 mins. 50 secs.
2. Pochkhanawalla J. H. Time—6 hrs. 38 mins. 57 secs.
3. Mistry T. B. Time—6 hrs. 46 mins. 52 secs.
4. Engineer B. H. Time—7 hrs. 12 mins. 53 1-5 secs.
5. Master M. J. Time—7 hrs. 27 mins. 36 secs.
6. Joshi R. M. Time—7 hrs. 27 mins. 36 1-5 secs.
7. Engineer M. S. Time—7 hrs. 27 mins. 36 2-5 secs.
8. Kapadia J. B. Time—7 hrs. 28 mins. 53 secs.
9. Rivetna F. J. Time—7 hrs. 29 mins. 58 secs.

Bombay : Gymkhana Sports.—

Long Jump.—1, R. G. Hopkins; 2, R. W. Douglas; 3, C. N. Reed. Distance 18 feet 9$\frac{1}{2}$ inches.

Sack Race.—1, A. S. M. Young; 2, E. A. Allen, 3, H. F. S. Gedge.

Mile Relay (Open) :—1, 52nd Field Battery R. A. Kirkee; 2. Cathedral High School Old Boys Assn; 3. 1st Bn. the Cheshire Regt. Time 3 mins. 56 secs.

Half mile :—1, A. J. Elkins; 2, Sawyer; 3. E. A. Allen. Time—2 mins. 12 secs.

Putting the Shot :—1, W. B. Scheiter; 2, E. A. Allen ; 3. Lt. Beauchamp. Distance 39 feet 9 inches.

Quarter Mile Obstacle Race for the Buff's Challenge Cup :—(Rugby Football Player only) 1. E. A. Allen ; 2, C. N. Reed ; 3. A. G. Coutts. Time—1 min. 20 secs.

120 Yards Veterans' Race (Handicap)—1 W. H. Cummings, 2, G. Osborne Smith, 3. Capt. Sir E. J. Headlam. Time 15 secs.

Band Race. Ellis Janes; 2, Gonsalves; 3, R. Pereira.

120 Yards Hurdle Race—1, C. N. Reed; 2. O. H. de St. Croix Time—17 secs.

100 Yards (Open). 1. Bdm. P. G. Forsyth; 2 R. A. Sneddon, 3, D. Oliveira. Time—10-3-5 secs.

100 Yards Flat Race: (Challenge Cup)—

1, R. G. Hopkins; 2. W. B. Schleiter. Time—10 2-5 secs.

$\frac{1}{4}$ Mile Flat Race. (Open) : 1. Bdm. P. G Forsyth; 2, Gnr. Edwards; 3, Pte. Williams. Time—52 4-5 secs.

Tilting the Bucket—1, A. G. Elkins and W. Newson.

High Jumps—1, A. G. Elkins; 2, C. N. Reed, Height 5 feet 6 inches.

Quarter Mile.—(Challenge Cup) 1. J. D. Boyle; 2, J. A. Gordon. Time—56 3-5 secs.

Mile (Open)—First Prize Cup presented by the Willingdon S. Club.

1, V. K. Basroor; 2, K. K. Nambiar; 3, Pte. Williams; 4. A. J. Elkins, Time—4 mins. 57 secs.

220 Yards—(Handicap.) 1, J. A. Gordon; 2, R. G. Hopkins; 3, E. A. Allen. Time—24 1-5 secs.

Tug-of-war. 1. Old Cheltonians, 2. Rugger Side.

Young Challenge Cup.—Messrs. Hopkins and Elkins tied,.

Ladies Egg and Spoon Race. 1. Mrs. Acton; 2. Mrs. Prophet.

Special Prize.—R. A. Sneddon was awarded a Special Prize which was presented by some person who preferred to remain anonymous for his brilliant running in the Relay Race.

Lahore : Punjab Olympic Trials—

The following are the results :—

Discuss Throw (Senior) :—C. F. W. Spence 1. Malik Sher Baz Khan 2 ; Indar Singh Dhillon 3 ; Distance 77 ft. 3$\frac{1}{2}$ ins.

Pole Vault (Senior) :—Kapur Singh Sidhu 1. Ram Partap ; 2. Taj Ahmad Khan 3. Height 9 ft. $\frac{3}{4}$ ins.

100 Yards Dash (Junior) :—G. A. Malli 1; Zulfikar Ali 2 ; Wazir Chand 3 ; Time. —10 mins. 4-5 secs.

100 Yards Dash (Senior) :—Abdul Hamid 1 ; Wilburn Lal 2 ; H. A. Soofi. 3. Time. 10 mins. 3-5 secs.

Hop Step and Jump. (Senior) :—Akbar Hayat 1; Ghulam Murtaza 2 ; Indar Singh Dhillon 3. Distance 38 ft. 5$\frac{1}{2}$ ins.

One Mile (Senior) :—Gurbachand Singh 1; Mukand Singh Sidhu 2; Abdul Malik Dar 3. Time.—4 mins. 41 secs.

High Jump (Junior) :—Syed Nazar Hussain and Akbar Hayat 1; Darshan Singh and Mehar Chand Dhawan. 3. Height 5ft. 2ins

Half Mile (Junior) :—Harchand Singh, 1; Balwant Singh, 2; Gulbir Bahadur 3. Time.—2 mins. 15 secs.

120 Yards High Hurdles (Senior) :—Abdu Hamid, 1; Wilburn Lal, 2. Time.—1 1-5 secs.

High Jump (Senior) :—Harpal Singh Sadhu 1; Sawar Sher Zaman 2. Height 5 ft. 3-8 in.

Quarter Mile (Junior) :—Harchand, 1; Balwant Singh, 2; Mohd. Afzal, 3. Time.— mins. 2-5 secs.

Long Jump (Senior) :—G. A. Malli, 1; Ram Parshad Bhalla. 2; Niaz Ahmad Khan, 3. Distance 20 ft. 3¾ ins.

Quarter Mile (Senior) :—Mohd. Azzal, 1; H. A. Soofi 2; E. S. Whiteside 3. Time—55 secs.

50 Yards Dash (Junior) :—G. A. Malli 1; Wazir Chand, 2; Zulfikar Ali, 3. Time.— 6 secs.

16lb Shot. Put (Senior) :—Dev Raj Narang, 1; Malik Sher Baz Khan, 2; Muzuffur Ali, 3. Distance 38 ft. 7½ ins.

220 Yards Dash (Senior) :—Abdul Hamid, 1; Wilburn Lal, 2; F. W. Whiter, 3. Time.—23 2-5 secs.

Hammer Throw (Senior) :—P. L. Bedi, 1; Malik Sher Baz Khan, 2. Distance 108 ft. 4 ins.

Five Miles (Senior) :—Gurbachan Singh, 1; Abdul Malik Dar, 2. Time.—27 mins. 20 secs.

Javelin Throw (Senior) :—C. F. W. Spence, 1; Inder Singh Dhillon, 2; Malik Sher Baz Khan, 3. Distance 106 ft. 3 7-8 ins.

220 Yards Low Hurdles (Senior) :—Abdul Hamid, 1; Arjun Singh, 2. Time.—26 mins. 1-5 secs.

Half-Mile (Senior) :—M. Afzal; 1. Mohd. Zaka Ullah, 2; M. G. Spence, 3. Time.—2 mins. 9 secs.

Lahore; All India Olympic Trials—

The following were the results :—

220 Yards Flat :—1, Abdul Hamid, (Punjab); 2, W. Willis (Bombay), 3; Harcharan Singh, (Patiala). Nine ran. Won by 3 yards 1 ft. Time.—23 3-5 secs.

Step and Jump :—1, Akbar Hayat (Punjab) 2, Ghulum Murtaza, (Punjab), 3; L. C. Tapsell, (Bengal); Distance 40 feet. 11¾ ins. Eight competed. Ghulum Murtaza jumped 40 ft. 6¾ ins. and L. C. Tapsell 40 ft. 3 ins.

Half-mile :—1, Mohd. Afazal (Punjab), 2, Murphy (Madras); 3 Bhagat Singh (Patiala). Four started. Raju did not complete the course. Won by 3 yards. 15 yards. Time.—2 mins. 5½ secs.

220 Yards Hurdles :—1. Abdul Hamid (Punjab); 2, W. Perris, (Bengal); 3, Wilburn Lal, (Punjab). Only three ran. Won by 5 yards, 6 yards. Time.—2, secs.

Discus Throw:—1, Sher Baz Khan (Punjab), 2, L. C. Tapsel (Bengal); 3, C. F. W. Spence, (Punjab). Six entered. Distance 77 ft. 3 ins. Tapsell threw 76 ft. 7 ins. and Spence 71ft. 4⅞ ins.

Hammer throw :—1, Sher Baz Khan (Punjab); 2, P. L. Bedi, (Punjab). Only two competed. Distance 97 ft. 6¾ ins. Bedi threw 96 ft. 9¾ ins

One mile :—1, Gurbachan Singh, (Punjab); 2, N. Gansiah (Mysore); 3, Gujar Singh (Patiala). Six ran. Won easily. 10 yards between second and third. Time.—4 mins. 423-5 secs

100 Yards :—R. A. Sneddon (Bombay) P. A. D'Avoine. (Bombay) 2; Abdul Hamid (Punjab) 3. Won by inches same between second and third. Time.— 10-1/5 secs.

Pole Vault :—D. K. Chowdhry (Bengal) 1; Taj Ahmed Khan, (Punjab) 2; Rampartap and Kapur Singh (both Punjab) 3. Distance 10 ft. 5-8 inches.

Long Jump Dalip Singh, (Patiala), 1; G. A. Malli, (Punjab), 2; Naranjan Singh (Patiala), 3. Distance 21 ft. 1⅜ ins.

120 Yards Hurdles :—Abdul Hamid Punjab), 1; Heathcote, (Madras), 2; L. C. Tapsell, (Bengal), 3. Won by 2 yards. 5 yards. Time.—15-4-5 secs. D'Avoine would have placed but he fell at the last hurdle

High Jump :—Abu Yusuf, (Bengal), 1; Baldraj (Madras), 2; Sowar Sher Zaman (Punjab), 3. Height 5 ft. 10 1-4 ins.

Javelin Throw :—Indar Soingh (Punjab), 1; S. K. Chowdhry (Bengal), 2; C. F. W. Spence (Bengal), 3. Distance 119 ft. 11 ins.

5 Miles :—D. B. Chowan (Bombay), 1; Gurbachan Singh (Punjab), 2; Abdul Malik (Punjab), 3. Time.—27 mins. 24 secs. Gujar Singh of Patiala finished third but was disqualified for boring.

Shot Put :—Dev Raj Narang (Punjab), 1; Sher Baz Khan (Punjab), 2; Muzaffar Ali, (Punjab), 3. Distance 38 ft. 11 ins.

440 Yards :—Abdul Hamid (Punjab), 1; M. Afzal (Punjab), 2; Harcharan Singh (Patalia), 3. Time 51-3-5 secs. Willis was disqualified for cutting the corner line. Of the Provinces the Punjab did the best winning 11 first of the 18 events, not to say the number of seconds and thirds she registered.

Lahore District Army Championships—

The following are the results :—

220 Yards :—Royal Scots Fusiliers, 1; Hampshire Regiment, 2; Durham Light Infantry, 3. Time.—1 min. 17 2-5 secs

440 Yards :—Seaforth Highlanders, 1 ; Hampshires, 2 ; Royal Fusiliers, 3, Time.—3 mins. 5 3-5 secs.

880 Yards :—Hampshires, 1; Durhams, 2 ; Rifle Brigade , 3. Time.—6 mins. 14 9-10 secs.

1 Mile :—Rifle Brigade, 1 ; Durhams, 2, R. S. Fusiliers and Hampshires tied for 3rd: Time.—5 mins. 17 4-5 secs.

100 Yards :—Durhams, 1; R. S. Fusilers, 2; Hampshires, 3. Time.—32 mins. 3-5 secs.

120 Yards Hurdles :—Seaforth, 1 ; R. S. Fusiliers, 2 ; 7th A. C. C. R. T. C. 3.

Relay Race :—R. S. Fusiliers, 1; Durhams 2 ; R. Fusiliers, 3. Time.—2 mins. 54 2-3 secs.

Putting the Shot :—R. S. Fusiliers, 1 ; Sea. forths, 2 ; Hampshires, 3. Distance 66 feet. 7½ ins.

Best Individual Putt :—Fusilier Ferguson (R. S. F.) 34 ft. 11½ ins.

Long Jump :—Rifles Brigade, 1 ; Durhams 2; 7th A.C.C.R.T.C. 3.

High Jump :—Hampshires, 1 ; Durhams 2; Rifle Brigade 3 ; Height 6 feet 7 ins.

Championship : 1, Durhams 19 Pts. ; 2. Royal Scotts Fusiliers and Hampshires tied 18½ pts.

Poona : Poona Brigade Area Sports—

The results were :—

BRITISH UNITS.

100 Yards : Final :—1. Cpl. Westerman, Cheshires ; 2. Bdr. Forsyth, R. A. ; 3 Lieut. Stevens, R. T. C. Time.—10 3-5 secs.

High Jump : Final :—1. Gnr. Dare, R. A.; 2. Lieut. Kelsall R. T. C. Height, 5 ft. 4 ins.

400 Yards : Final :—1. Bdr. Forsyth R. A. ; 2. Lieut. Proes, R. A. ; 3. Pte, Ash, Cheshires. Time.—55 2-5 secs.

One Mile : Final :—1. L.-Cpl. Davies, R. U. R. ; 2. Pte. Crane, R. T. C. ; 3. Bdms, Flaxman, Cheshires. Time.—5 mins. 3 4-5 secs.

120 Yards Hurdles : Final :—1. Lieut. Kelsall, R. T. C. ; 2. Pte. Lane, Cheshires; 3. L.-Cpl. Wilson, R. U. R. Time.—17 1-5 secs.

220 Yards : Final :—1. Bdr. Forsyth R. A.; 2. Pte. Jones, Cheshires ; 3 Lieut. Stevens, R. T. C. Time.—23 3-5 secs.

880 Yards : Final :—1 Gnr. Edwards, R. A. ; 2. L.-Cpl. Gibbinson, R. T. C.; 3. Rfm. Shanks, R.U.R. Time.—2 mins. 13 4-5 secs.

Long Jump : Final :—1. L.-Cpl. Wilson, R.U.R. ; 2. Sgt. Beyron, R.U.R. ; 3 Rycroft, Cheshires. Distance 32 ft. 9½ ins.

Putting the Shot : Final :—1. Rfn Short, R.U.R. ; 2. Sgt. Chester R.T.C.; 3. Cpl. Rycroft, Cheshires. Distance 32 ft. 9½ins.

Tug-of-War : Final :—1st Field Brigade, R.A. beat Royal Ulster Rifles.

Relay :—1. 1st Field Brigade, R.A., 2. 2nd Bn. Royal Ulster Rifles. 3. 1st Bn., 22nd Cheshires.

Points :—1st Field Brigade, R. A. 24, 2nd Bn. Royal Ulster Rifles, 8th A.C.C., R.T.C. 15. 1st Bn. 22nd Cheshires, 11.

INDIAN UNITS.

Long Jump : Final :—1. Naik Balu More, 4-5 M. L. I.; 2. L.-Duffadar Abdul Satar Khan, 3rd Cavalry; 3. Sapper Mahdu Singh, R. B. S. & M. Distance 19 ft

220 Yards : Final :—1. Sapper Mahdu Singh, R. B. S. & M.; 2. L.-Duffadar Hashmat Ullah Khan, 3rd Cavalry; 3. Sepoy Sambhu Matkar, 4-5 M. L. I. Time.—24 seconds.

Putting the Shot : Final :—1. Hav. Subha Khan, R. B. S. & M.;2. Naik Baksh Khan R. B. S. & M.; 3. Sepoy Inam Din, R.B. S. & M. Distance 30 ft. 6½ ins.

880 Yards : Final :—1. L-Naik Ram Singh, 1-2 Bombay Pioneers. ; 2. Sepoy Maruti Ghorpade, 4-5 M.L.I.; 3. Sapper Basant Singh, R. B. S. &M., Time.—2 mins. 11 3-5 secs.

100 Yards : Final :—1. L.-Drf. Hashmat Ullah Khan ; 2. Sapper Hakam Khan R B.S. M.-3rd Cavalry and Naik Balu More, 4-5 M. L. I. (dead heat). Time. 11 secs.

440 Yards : Final :—1. Sepoy Shivram Powar, 4-5 M.L.I. ; 2. Hav. Ramchander Gaikwad, 4'5 M.L.I. ; 3. Sapper Karam Dad, R.B.S. and M. and L.-Naik Dewa Singh, 1-2 Bombay Pioneers (dead heat). Time.—57 secs.

Mile : Final :—1. L.-Naik Ram Singh Bombay Pioneers ; 2 Pioneer Bagh Sing, 1-2 Bombay Pioneers ; 3. Sapper Chanda Singh, R.B.S. Less and M. Time.—4 mins. 52 2-5 secs.

High Jump : Final :—1. L.-Dfr. Abdul Sattar Khan, 3rd Cavalry ; 2. Sapper Allah Ditta; R.B.S. M.; 3. Hav. Bhiwa Aire, 4-5 M.L.I. and Sapper Chanderrao More, R.B.S. M. (dead heat). 5 ft. 3 ins.

Tug-of-War : Final:—Field Company, R B.S. & M. Beat the Depot Company, R.B.S. & M.

Relay Race :—1. 1/2nd Bombay Pioneers, 2. Field Company, R.B.S. & M. 3. 4-5th Maratha Light Infantry.

Points :—Field Company R.B.S. & M. 19; 4-5th Maratha Light Infantry 15 ; 1-2 Bombay Pioneers 12; 3rd Cavalry 10 Depot Company, R.B.S. & M. 6.

Matunga : 30 miles Cycle Race :—

P. W. Secretary. 1hr. 47 mins. 30 secs. 10 Miles Running Race Nambiar 1hr. 5 mins.

Hyderabad : State Olympics.—

The following are the results :—

100 yards :—Henry Paul (Y. M. C. A.) 10 secs; 1st; G. Weston, (Railway) 2nd.

Long Jump :—Henry Paul (21 ft. 1¾ inches; 1st; V. Joseph, (Railway) 2nd.

Half Mile :—G. Weston, (Railway), (2 mins. 13 2-5 secs) 1st; F. Ahmed Khan, (Hydera-Dist. Police) 2nd.

Shot Put :—A. Dunham (Y. M. C. A.), (31 ft. 7¼ inches) 1st; A. Duffield, (Railway) 2nd

120 Yards Hurdles :—F. Ahmed Khan, (H. D. Police), (18 4-5 secs.) 1st; Abdul Kuddus, (H. D. Police) 2nd.

High Jump :—Henry Paul, (Y. M. C. A.), 5 ft. 7 inches) 1st, E. Duffield, (Railway 2nd.

One Mile Race :—Oomer Khan, (Railway) (5 mins. 2 2-5 seconds) 1st; G. Manickam (Y. M. C. A.) 2nd.

440 Yards Dash :—G. Weston, (Railway), (56½ seconds) 1st, Henry Paul 2nd.

Pole Vault :—I. Benjamin, (Y. M. C. A.), (9-ft.5 inches) 1st, E. P. Yesudoss, (Y. M. C. A.) 2nd.

220 Yards Dash :—H. Paul (Y. M. C. A.), (22 2-5 secs.) 1st; G. Weston, (Railway) 2nd.

Tug-of-War :—8th Light Cavalry team 1st; Y. M. C. A. team 2nd.

One Mile Relay Race :—Railway Recreation Club team, (4 mins. 2 1-5 secs.) 1st, 4th Hyderabad Infantry team 2nd.

RACQUETS.

Rawalpindi : Northern India Tournament.—

The results of the matches were :—

Open Singles Championship of Northern India :—(Holder Lieut. J. G. Newton, 1st Bn. the Rifle Brigade).

In the final round, Newton beat Captain Marson, 4/7th Dragoon Guards by three games to two, 11—15, 9—15, 15—8, 15—3, 15—9.

Open Doubles :—(Holders Lieut. J G. Newton, 1st Bn. the Rifle Brigade and Lieut. O. N. D. Sismey, 60th Rifles).

In the final Lieut. J. G. Newton, 1st Bn. Rifle Brigade and Capt. E. St. J Birnie, Sam Browns Cavalry F. F. beat Major R. A. Turner, R. E., and Lieut. Garmoyle by four games to one 15—10, 15—7, 9—15, 15—3, 18—1.

School Pairs :—(Holders Eton. Lieut. J. G. Newton, 1st Bn. the Rifle Brigade and Lieut O. N. D. Sismey, The 60th Rifles). In the final Eton (Newton and Garmoyle) beat Haileybury (Marson and Whishaw) by 4 games to love 15—9, 15—10, 15—6, 15—11.

Regimental Doubles :—(Holders Lieut. C. J. Herbert Stepney and Lieut. O. N. D. Sismey, the 60th Rifles). In the final the 4/7th Dragoon Guards Captain Marson and Lieut. Williams beat the 1st Bn. Rifle Brigade (Lieut. J. G. Newton and Lieut. Garmoyle) by 4 games to love 15—7, 15-11, 15—12, 18—16.

In the handicap events, Marson won the handicap singles and Marson and Williams won the handicap doubles

POLO.

Calcutta Indian Polo Association Championship—

Bhopal 6. goals The Travellers 1.

Calcutta : Ezra Cup Tourney.—

Deccan Travellers. Secunderabad. . 7 goals
H. E. Governor's Staff .. .. 5 goals

Madras : Bobbili Cup—

Mysore Cavalry .. .. ..4 goals
Madras Gymkhana .. .. .. 1 goals

Poona : Junior Handicap Tournment—

Baria .. .. 4 goals
Poona .. .. 3 goals

Poona : Midsummer Handicap Tournament—

D .. .. 5 goals
F .. .. 4 goals

New Delhi : Prince of Wales Cup—

Nawab of Bhopal's Team .. .. 9 goals
P. A. V. O. Pilgrims .. .. 5 goals

Delhi : Duke of Connaught's Gold Cup—

Viceroys' Staff .. .. .. 8 goals
Cavalry Club .. .. 6 goals

Simla : Viceroys' Staff Cup—

Snowdon .. .. 5 goals
Gunners .. .. 2½ goals

Simla Beresford Cup—

Viceroys' Staff .. .. ..11 goals
K. S. O. B. Lancers .. .. 5 goals

Lahore : Indian Cavalry Tournament—

P A .V. O. Cavalry 6. goals. Central India Horse .. .. 5 goals

Madras : Venugapal Challenge Cup—
Mysore Cavalry .. .. .. 4 goals
Madras Sappers and Miners .. .. 2 goals

Mahableshwar : Aga Khan Challenge Cup—
The Final scores were :
Third Cavalry .. .. .. 7 goals
Government House .. .. .. 4½ goals

Meerut : Inter Regimental Tournament—
11th P. A. V. O. Cavalry .. .. 5 goals
Central India Horse .. .. .. 4 goals

Rawalpindi : Tradesmen Cup—
Dragoons .. .. 5½ goals
Poona Horse .. .. 2 goals

Secunderabad : Captains and Subalterns Cup—
8th K. G. O. Cavalry .. .. 5 goals
9th Queen's Royal Lancers .. .. *Nil*

Secunderabad : Captains and Subalterns Challenge Cup—
8th K. G. O. Cavalry .. .. 5 goals
9th Queen's Royal Lancers .. .. *Nil.*

Secunderabad :
Hyderabad Troops Inter Regimental Handicap Tourney—
2nd Imperial Service Lancers .. 4 goals
The Staff .. .. 2 goals

Secunderabad : Low Handicap Tournament—
8th K. G. O. Cavalry .. .. .. 3 goals
Rahut Munzi .. .. I goal.

Calcutta; Carmichael Cup—
Darbanga .. .. 6 goals.
North Bengal Mounted Rifles .. 3½ goals.

Secunderabad; Chenoy Cup—
7th Cavalry .. .. 6 goals
2nd Hyderabad Lancers .. .. 3 goals

FOOTBALL.

Calcutta : I. F. A. Shield—
Sherwood Foresters .. .. .. 2 goals
Dalhousie .. .. *Nil.*

Bombay : Nadkarni Cup—
Colaba United .. .. 2 goals
King George V. F. C... .. .. 1 goal

Bombay : Rovers Cup—
Royal Warwicks .. .. .. 2 goals.
1st Field Brigade R.A., Kirkee .. *Nil*

Bombay : Indian League—
'A' Division—Portuguese Association.
'B' Division—Colaba Rangers.

Bombay : Charity Match—
Warwicks .. .. 1 goal.
Ulsters .. .. 1 goal.

Bombay: Gossage Cup.—
G. I. P. Railway .. .. .. 1 goal.
Bombay Gymkhana .. .. .. *Nil.*

New Delhi: Mahendra Memorial Challenge Cup.—
Gordon Highlanders A .. .. 2 goals
Headquarters .. .. *Nil*

Simla : Durand Tourney "Hard Lines" Cup
Black Watch .. .. 3 goals
Buffs .. .. *Nil*

Simla : Durand Cup—
Sherwood Foresters .. .. .. 4 goals
York and Lancs. .. .. .. 2 goals

Simla : International—
Indians .. .. 1 goal
Europeans .. .. 1 goal

Bangalore : Madras District British Army Cup.
Royal West Kents .. .. .. 4 goals.
2nd Armoured Car Company .. 1 goal.

Jubbulpore : Wallace Cup—
'B' Coy. P. W. Volunteers .. .. 2 goals
'A' Coy. Signal Training Centre .. 1 goal

Quetta : Baluchistan District Cup—
East Lancs .. .. 4 goals
Royal Weclh Fusiliers .. .. *Nil*

Secunderabad : All India Tournament—
Sportsmen .. .. 1 goal
Wiltshire Regt. .. .. .. *Nil*

Allahabad: Chesney Memorial Cup.—
E. I. R. Dinapore .. .. .. 2 goals
'D' Coy Worcesters .. .. .. *Nil.*

CRICKET.

Calcutta.—

Anglo-Indians 206, All Assam 117.

All Assam 78, All Europeans 120.

All Assam 136, All Bengal 206 for 6.

All Assam 206, Indians 165 for 3.

Calcutta Annual Match :—

Calcutta Scottish 203 for 7.

Calcutta Light Horse 134 for 9.

Bombay.—

Hindu Representative XI 306, Islam Gymkhana 176 for 6.

Dr. Kanga's XI 301, Bombay Gymkhana 194.

Dr. Kanga's XI 227 for 7, and 274. Hindu Representative XI 239.

Bombay Gymkhana 199 for 9 and 120 for 4, Islam Gymkhana, 86 and 117.

Hindu XI 370 for 7, Bombay Gymkhana 199.

Bombay Quadrangular Tournament.—

Parsis 316 and 246, Europeans 278 and 150.

Bombay:—Poona Gymkhana 53 and 141 for 9 (Meyer 10 for 77.)

Bombay Gymkhana 201 for 6.

Bombay :—

Bombay Gymkhana 393, Capital Club 35 and 179.

Sholapur Quadrangular.—

Hindus 251 and 22, Mahommedans 73 and 203.

Nagpur. C. P. Quadrangular.—

Christians 140 and 412, Hindus 294 and 139.

Madras—

Colombo 386 and 202 for 7,

Madras C.C. 243.

Poona :—

Bombay Gymkhana 292 for 6 (R. J O Meyer 142).

Governors XI. 219 for 3.

(Deodhar not out 110)

Poona : H. E. The Governor's XI 346 for 7 (Meyer not out 134, Stephenson 113).

Byculla Club 191. (Meyer 6 for 62.)

Poona :—

Bombay Gymkhana 373 for 5

(W. J. Cullen 140, C.L . Reed not out 84).

Poona Gymkhana 27 (Meyer 6 for 10).

Ahmedabad Pentangular Tournament—

Parsis 53 and 85.

Hindus 191.

Kurla: Kurla Tournament—

Kurla C.C. 60 and 48.

Shri Shivaji C.C. 182.

Gwalior : Gwalior Tournament.—

Aligarh 280 and 71 for 3.

Indore 123 and 225.

Lahore : Northern India Triangular Tournament.—

Mahomedans 177 and 167.

Hindus 328 and 20 for 0.

Rajkot : Kathiawar Quadrangular.

Zhalawar XI 270 and 144.

Halar XI 146 and 269.

Naini Tal :—

Colvin Club 69 and 86.

Aligarh 349.

GOLF.

Calcutta.

Calcutta : Colombo Medal.—

J. A. Thompson 86—14=72.

A. McGregor 91—18=73.

J. S. Smith 82—9=73.

R G. MacTunes 89—14=75.

C. M. Thornman 94—18=76.

W G. Ryan 81—5=76.

Ladies' Amateur Championship —

Miss Campbell beat Mrs Thomas 2 up.

Amateur Championship of India—

E. L. Watts (Calcutta) beat D. J. Paton by 1 up.

Assam Championship—

E. L. Jackson beat A. J. Garland 4 and 3.

Poona.

LADY WILSON PRIZE

Final.—Mrs. Ker beat Mrs Benton atthe19th

Ladies' Monthly Medal Competition.—

Mrs. Finnis 61 ; Mrs. Dexter-Davison 65. Mrs. Somerville 68, Mrs Inglis 69 ; Miss Mangin 69

Ladies' Foursomes.—

Final.—Mrs. Ker and Miss Mangin Ceat Mrs. Gilbert and Mrs. Ireland 1 up.

Final.—Dennys beat Bunbury 2 and 1.

Dexter-Davison Cup: Final:—H. E. the Governor's Staff beat I. M. S.

W I. T. C. Cup Competition.—

Dennys 162—8=154.

Griffith 165—10=155.

Philpott 167—10=157.

Bate 169—12=157.

Melhuish 169—24=145.

Inglis 170—4=166.

Oulton 171—12=159.

O'Dowd 177—16=161.

Mangin 188—34=154.

Gilbert 189—28=161.

Nannini 189—26=163.

Ireland 191—34=157.

Foursomes.—

Poona	5¾ pts.
Bombay	3¼ pts.

Singles.—

Poona	9¾ pts
Bombay	7¼ pts.

Governor's Cup.—

Oulton beat Dowse 1 up.

Leach and Weborny Cup.—

Inglis 79+73=152.

J. S. Martin 81+72=153

Ker 77+77=154.

Bate 82+72=154.

Melhuish 82+73=155.

Pooley 79 +76=155.

Benton 80+76=156.

Becher 84+74=158.

Dennys 85+75=160.

Fowler 83+77=160.

Boyes-Cooper 84+76=160.

Harty 82+79=161.

LADIES' BOGEY COMPETITIONS.—

Mrs. Nannini 3 down, Mrs Inglis 6 down, Mrs. Newman 6 down, Miss Wiles 7 down.

Deolali.

Deolali Challenge Cup.—

Colonel Pennefather 92—15=77.

Captain Curtis, 97—19=78

Captain Booker, 88—9=79.

Major Martin 95—16=79.

Captain Dibben 91—9=82.

Captain Mullholland 104—20=84.

Ladies' Championship Challege Cup.—

Miss E. C. Miller	64
Mrs. Dennis	66.
Miss Booker	67.

Ladies' Foursomes.—

Mrs. Bunbury and Mrs. Denni 63—8=55.

Mrs. White and Miss Booker 69—14=55.

Nasik.

Gymkhana Cup —

The scores are :—

Walsh (Nasik) 88—11=77.

Raven (Bombay) 85—7=78.

Kelly (Bombay) 91—12=79.

Millard (Nasik) 94—14=80.

Clayton (Bombay) 86—4=82.

Jenkins (Ahmedabad) 100—18=82.

Sanderson (Bombay) 88—5=83.

Montgomery (Bombay) 92—8=84.

Sherston Baker (Bombay) 100—16=84.

Davies (Nasik) 94—10=84.

Men's Foursomes.—

Hiley and Bushby (Nasik) beat Cunningham and Clarke (Bombay) 5 and 4.

Presidents Cup.—

The leading scores are as follows. For the President's Cup (scratch).—

Irvine 84, Inglis 87, Cunningham 87 Thow 88, Giles 88, Davies 89, Sanderson 92, McCormack 93, Sanson 94, Walsh 93.

Long Drive.—

1 Thow 276 yards.

Best Average, Drive.

Thow 263 yds.

Gymkhana Cup.—

A. Clarke (Bombay) 90—13=77.

Sherston Baker (Bombay) 97—18=79

Reynolds (Satara) 97—18=79.

Walsh (Nasik) 93—11=82.

Sanderson (Bombay) 88—5=83.

Moore (Bombay) 91—8=83.

Ladies' Putting Competition.—

Mrs. Sanderson 45.

Mrs. Giles 52.

Mrs. McCormack 56.

Mrs. Golder 57.

Mrs. Reed 57.
Mrs. Illingworth 57.
Mrs. Montgomery 59
Mrs. Reynolds 60.
Mrs. Sanson 60.
Mrs. Walsh 62.

Military Cup.—
Major B. Shah, I. M. S. 99—18=81
Capt. H. Ozanne (Warwicks) 96—8=86.
Col. R. F. Beyts (I. A.) 98—10=88.
Col. C. Couchman (R. E.) 96—7=89.
Capt. J. Martin, I. M. S. 106—16=90.

Nasik: Challenge Shield for Championship of Western India.—
Cunningham beat Irvine.

THE CAPTAIN'S CUP—
Walsh met Sanson giving him 3 strokes and they had a very close match which was only decided by a putt on the last green Walsh winning.

THE BOMBAY BANGLE.—
The Bombay Bangle was won by Mrs. Prophet who defeated Mrs. Reid after a very close game, being all square at the twelfth and playing one more hole Mrs. Prophet won.

Ladies' Foursomes.—
Mrs. Inglis and Miss Marston beat Mrs. Golder and Mrs. Chishalm 5 and 3.

Gulmarg.

Public Schools Handicap Foursomes:—
Malik and Bevis (Eastboure) beat Underwood and McCalmont by 6 and 5.

Men's Championship.—
Major Buist beat Kenney by 3 and 2.

Indian Army Cup Tournament.—
Ladies—Mrs. Wreford (7) beat Mrs. Keary(15) by 2 up.

D. P. Challenge Vase.—
Mrs. Henry beat Miss Ferrard by up 4 and 3.

Civil Service Cup.—
Hathaway(7) beat Malik (Scr.) on the 18th Green.

Hill Vase.—
Major C. M. Stewart beat Col. J. L. R. Weir by 6 up and 5.

Ladies, Handicap Foursome.—
Miss Pennruddock and Mrs. Wreford (9) beat Mrs. R. I. Jones and Miss Baber (38) on the 18th.

Ladies' Amateur Championship of Northern India.—
Miss Pennruddock beat Mrs. R. P. Henry by 4 and 3.

Veterinary Officers Cup.—
Mrs. R. I. Jones and Capt. Schute (16) beat Mr. and Mrs. H. S. Malik (20).

Medon Cup.—
Mrs. R. I. Jones and Captain Schute (19) beat Mrs. Cave Brown and Col. Weir by 2 up.

Mount Abu: Limbdi Cup.—
Captain and Mrs Warry beat. Capt. and Mrs. Hancock 3 and 1.

Abbottabad.

The results are as follows—

Ladies' Challenge Cup.—
Final.—Mrs. Yates (11) beat Miss Lane (24) 3 and 2.

Men's Challenge Cup.—
Final—Leith Ross beat Long 3 and 2.

Mixed Foursomes Challenge Cup.—
Finals.—Owing to unavoidable scratchings only two pairs were left in, *viz.*, Mrs. Duncan and Massy and Mrs. Dutton and Tims, the latter winning the final by 1 up.

Captains' Cup.
Finals—Alexander (6) beat Long (12) by 4 and 2.

WRESTLING.

Patiala, World's Championship.—
Gama beat Zbysko within a minute.
Patiala :—Imambux beat Goanga.

Bombay: 5H Week Tournament.—
Rajaram beat Baburao in 1 min. 50 secs.
Santu beat Bhau in 1 min. 25 secs.
Ganu Sase and Akbar Ali. A draw
Pratap Singh, (Poona) *vs.* Pandu Patil Shiralkar (Shirale). A draw.

Ganu *vs.* Chandu. A draw.

Balu beat Mugatrao in 56 secs.

Ghatu *vs.* Shripa. A draw.

Gulam Haider beat Gulam Kadar in 4 mins 47 secs

Gangaram beat Maroti in 1min. 53 secs.

Ramchander beat Dagadu in 1 min. 10 secs

YACHTING.

Bombay.

Invitation Race :—R. B. Y. C. 72; R. C. B.C. 47; N.T.Y.C. 43; B.S.A. 71.
Inter-Club Trophy :—R.B.Y.C. 25; N.T.Y.C 38.

Poona.

Army Signal School beat Royal Connaught Boat Club.
Naini Tal Y. C., 3 (Wins.)
Jodhpur Y. C., 4.
Bhopal Y. C., 5.
Royal Bombay, Y. C., 8.

Naini Tal.

All India Challenge Cup.—

Total points on the two races :—

Naini Tal beat Bombay by 12 points.

BOXING.

Bombay.

Amateur Championships of India—

Flyweights :—P. C. Selladurai (Ceylon champion) beat M. Wadia (Bombay) on points after an extra round.

Bantamweights :—Signalman R. Hutchinson (Royal Corps of Signals, Karachi), beat M. Gregory (Armenian College, Calcutta) on points.

Featherweights :—Corpl. McKnight (Ulster Rifles, Poona), w. o. Lce-Corpl. Podger, Royal Corps of Signals, Karachi), the latter being unable to enter the ring due to a broken wrist.

Lightweights :—Pte. Porter (Sherwood Foresters, Karachi) beat L. A. C. Witham (R. A. F., Karachi) on points.

Welterweights :—Pte. L. Goode (Sherwood Foresters, Karachi) K. O. I. V. Jayaveera (Ceylon) in the first round.

Middleweights :—Corpl. MacMillan (Royal Ulster Rifles, Poona) K. O. Pte. White (Royal Warwicks, Bombay) in the first round.

Light Heavyweights :Lce-Corpl. MacMillan (Royal Ulster Rifles, Poona) beat L. A. C. Gates, (R. A. F., Karachi) on points.

Bombay : Military Tournament.—

Novices Competition (Finals—Featherweights: Pte. Polson (Warwicks) beat Gunner Howe (R. A.) the Gunner retiring at the end of the first round.

Lightweights : Pte. Walpole (Warwicks) beat Pte. Searl (Warwicks) on points.

Welterweights: Lce.-Cpl. Saundres (Warwicks) beat Pte. Wolsey (Warwicks) on points.

Middleweights : Gunner Pett (R. A.) beat Pte. Bagshawe (Warwicks) on points.

Light Heavyweights : L/Bdr. Thomas (R.A.) K. O. Gunner Tidyman (R. A.) in the second round.

Special Contests.—Stoker Sharples, (H.M.S. Ambrose) beat Pte. White, (Warwicks) on points. Pte. Bishop (Warwicks beat, Ord. Seaman Holloway (H. M. S. Effingham) on points.

A. B. Morgan (H. M. S. Effingham) and Pte. Sealey (Warwicks) fought a draw.

Pte. Price (Warwicks) beat Gunner Rutter (R. A.) on points.

A. B. Sturk (H.M.S. Effingham) beat Marine Ince (H. M. S. Effingham) on points.

Cpl. Ansell (Warwicks) beat Ord. Seaman Beaty (H. M. S. Effingham) the referee stopping the fight in the second round.

Stoker Reynolds (H. M. Submarine L2) beat Pte. Faint (Warwicks) in the second round.

Services Tournament.—

Bantamweights (Final)—Pte. Brunt (8st 6lbs " B " Coy. Warwicks beat Pte. Lowe (8st) 6lbs) " B " Coy. Warwicks on points.

Featherweights (Final)—Pte. Perks, "B" Coy. Warwicks, beat Pte. Ward, "B" Coy. Warwicks, on points.

Lightweights(Final)—Pte. Palfrey (9st 7lbs) " D " Coy. Warwicks beat Pte. Hemming (9st 7lbs) " D " Coy. Warwicks on points.

Welterweights (Final)—Lance-Corpl. Taylor (10st 7lbs) " D " Coy. Warwicks beat Lance Corpl. Walsey (10st 5lbs) " D " Coy. Warwicks on points.

Middleweights (Final)—Pte. Wheeldon (11s. 6lbs), " B " Coy. Warwicks beat Gnr. Spack (11st 6lbs) 14th Battery R. A.

Special Contests. Welterweights.—
Pte. White (10st 7lbs) " D " Coy. Warwicks and M. J. Hansatia, Sir Dinshaw Petit Institute drew.

Lance-Corpl. Saunders, " D " Coy. Warwicks,beat Sgt. Carless (10st 5lbs) I. A. S. C. the referee stopping the fight in the second round.

Lightweights.—Pte. Polson (9st 4lbs) " D " Coy. Warwicks beat Sgt. G. W. Quilter, Sir Dinshaw Petit Institute on points.

Pte. Sealey (9st 7lbs) " D " Coy Warwicks beat Pte. Walpale " D " Warwicks, the referee stopping the fight in the third round.

LightHeavyweight.—Lance-Bdr. Thomas (12st 2lbs) 14th Battery, R.A. beat Pte. Knight (11st 13lbs), " D " Coy. Warwicks on points.

Special Prizes.—Best Loser's Prize—Gunner Spack.

Best Novice Boxers' Prize.—Pte. Hemming.

Best All Round Boxer.—Denzil Martin.

Amateur Boxing Federation's Prizes.—Gunner Brown and Pte. Biddell.

Special Prize.—Gunner Green.

Bombay Presidency Amateur Championships:—

Flyweight (Final)—M. D. Wadia (Dinshaw Petit Gymnasium) beat L. A. C. Johnson (R.A.F. Karachi) on points.

Bantamweights(Final)—Jack Wright (Dinshaw Petit Gymnasium) beat Pte.Smith (Cheshires) on points.

Featherweights (Final.)—FDenzil Martin (B. B. & C. I. Railway Regt.) beat L. A. C. Hogan (R. A. F. Karachi) on points.

Lightweights (Final.)—Corporal McKnight (Ulster Rifles) beat Corporal Howlett (Middlesex Regt.) on points.

Welterweights (Final)—Lce.-Cpl. Goode,(Sherwood Foresters) knocked out L.-Cpl. Joyce (Warwickshires) in the second round.

Middleweights (Final.)—Rifleman McTier (Ulsters) beat Corporal Ansell (Warwickshires) on points.

Light Heavyweights Final.—L.-Cpl. McMillan (Ulsters) knocked out Pte. Butler (Cheshires) in the first round.

Special Contest.—Corporal McKnight (Ulsters) beat L. A. C. Witham(R. A. F.,Karachi) in the third round.

The Cups.—The Challenge Cups presented were:

The Sir Leslie Wilson Cup. for Bantamweights, Jack Wright.

The Sir Victor Sassoon Cup, for Lightweights, Corporal McKnight.

The Kemp Challenge Cup, for Welterweights, Lce.-Cpl. Goode.

The Best Losers' Cup, E. Frewin.

The Bombay Presidency Federation's medal, Mr. G. L. Chard.

Professional Contests.—

Catchweights :—G. Mistri (Bombay) (9st. beat Able Seaman Griss (H. M. S. Crocus) (9st 1lb) on points in a six round contest.

Lightweight Championship of Western India :—Fali Merchant beat Jack D'Souza on points over 12 rounds.

Heavy weight Championship of India.—

Gunner Melvin beat Sergt. Palmer, the latter retiring in the seventh round.

Middleweight Championship of India.—

Milton Kubes beat Sergt. Palmer on points

Percy Vengan beat Edgar Bright on points.

Rifleman Jennings beat F. Billimoria on points.

R. Mascarenhas beat R. Oomrigar, the latter being disqualified in the third round.

Fali Merchant beat Charlie, Tapsell the latter retiring at the end of the first round.

Eddie Simpkins (S.S. Rajputana) beat Sergt. Tom Carter (Bombay Police) on points.

Poona.

Team Events :—

Bantamweights :—Pte. Smith (Cheshires) beat Rfn. Bramble (Ulsters) on points.

Featherweight :—Cpl. McKnight (Ulsters) beat Pte. James (Cheshires),the referee stopping the fight in the second round.

Lightweight—Pte. Hampson (Cheshires) beat Bug. Jennings (Ulsters), the latter being disqualified in the third round.

Welsterweight : First String : L./Cpl. Spencer (Cheshires) beat Cpl. MacMillan (Ulsters) on points.

Cheshires 11 points.

Second String : Rfn. Ternahan (Ulsters) beat Pte. Durling (Cheshires) on points.

Middleweight : Rfn. McTear (Ulsters) beat Pte. Halewood (Cheshires) on points.

Light-Heavyweight:—L./Cpl. MacMillan (Ulsters) K. O. Cpl. Rycroft (Cheshires) in the first round.

Heavyweight—Rfn.Wilkinson (Ulsters) K. O. Pte. Bicketron (Cheshires)in the first round.

Special contests:—Flyweight : Cpl. Grimshaw (Cheshires) beatSgt. Moore (Cheshires) on points.

Lightweight :—Cpl. Slater (Ulsters) beat Rfn. Lake (Ulsters) on points.

Catchweighti Boy William (Cheshires) beat Boy Slattery (Ulsters) on points.

Middleweight Lce.Cpl : Best (Ulsters) beat Gnr. Arkless (Royal Artillery), the referce stopping the fight in the third round.

Lightweight :—Lce.-Cpl. Slater (Ulsters) beat Thompson (R.T.C.), the latter retiring in the third round.

Heavyweight :—Cpl. Watson (Ulsters) beat Gnr. Garratty (Royal Artillery) on points Cheshires vs. Ulsters:—Ulsters) 12 points.

Cheshires 11 points.

Southern Command Championships.—

Individual Championships.—Middleweight:—Bmdr. McDonald, I. BatteR. H. A., beat Rflm. McTear, Uslters, points.

LightHeavyweight:—Lce-.Cpl. McMillan, Ulster knocked out Gnr. Reece, I. Battery, R. H.A., in the scond round.

Heavyweight:—Sgt. Bugler Bendy, H. L. I. knocked out Rflm. Wilkinson, Ulsters,in the first round.

Bantamweight:—Pte. Cook, Loyals beat Lce.-Cpl. Forshaw, Loyals on points.
Featherweight:—Lce.-Cpl. Slater, Ulsters, beat Pte. Harding on points.

Lightweight:—Cpl. McKnight, Ulster, beat Lce.-Cpl. Dixon, Loyals on points.

Welterweight:—Pte. Gammell, R. W. Kents, beat Pte. Walsh, Loyals on points.

Flyweight:—Cpl. Grimshaw, Cheshires, beat Pte. Brown, Middlesex, on points.

Officers' Contests.—

Heavyweight:—Lieut. Clarke, Gloucesters, beat Captain Burke, 7th Gurkhas,on points.

Lightweight:—2nd Lieut. Brown, R.W Kents, beat Lieut. Horne, Seaforths on points.

Special Contests.—

Welterweight:—Pte. Davies, H. L. I., beat Sgt. Berlie, M. and S. M. Railway Rifles on points.

Catchweight:—Sgt. Bugler Bendy H.L. I. knocked out Bmdr. McDonald, "I" Batty., R. H. A. in the second round.

A. F. I. Contest:—Rflm. DeSouza, Poona Rifles, beat Rfm. Machado M. and S. M. Railway Rifles on points.

The prize for the most scientific boxer went to Pte. Gammell of the Royal West Kents while Rflm. Wilkinson of the Ulsters was judged the best loser in the tournaments.

Cheshires Annual Tournament—

Final Open Featherweight:—Pte. James, A Coy., beat Pte. Yates, B. Coy., on points.

Final Novices Middleweight:—Pte. Jamieson, D. Coy., got walkover from L-C. Lillie, B Coy., on medical grounds.

Final Novices Lightweight:—Pte. Clark, A Coy., beat Pte. Chase, B. Coy., on points.

Final Open Bantamweight:—Pte. Smith, B Coy., K. O. Pte. Whitby, D Coy., at the end of the first round.

Final Novices Flyweight:—Pte. Cheek, C. Coy., defeated Pte. Miller, D Coy., on points.

Final Novices Bantamweight:—Pte. Whitby, D Coy., beat Pte. Lloyd, B. Coy.,

Final Novices Welterweight:—Pte. Brewin, B Coy., beat Pte. Wright, D Coy. o on points

Final Open LightHeavyweight:—Cpl. Rycroft, B Coy., K. O. Lce.-Cpl, Burke, D Coy., in the third round.

Final Open Lightweight:—Cp. Burton. A. Coy., defeated Lce.-Cpl. Stephenson, D. Coy., in the first round.

Final Open Heavyweight:—Lce.-Cpl. Spencer, D Coy., was awarded the fight against Pte. Bickerton in the second round.

Final Novices Light Heavyweight:—Cpl. Rycroft, B Coy., was awarded this contest against Lce.-Cpl. Lillie, B Coy., who had to scratch on medical grounds.

Final Open Welterweight:—Pte. Halewood B Coy., beat Pte. Durling, B Coy., on points.

Final Novices Featherweight:—Pte. Finnigan, D. Coy., beat Pte. James, A. Coy., on points.

Final Open Fly-weight:—Sergt. Moore, C Coy., beat Cpl. Grimshaw, A Coy., on points.

The Company and platoon championship points were:—B Coy., 185½; D Coy., 159; A. Coy, 103½; C. Coy, 60½; H.Q., 8. The platoon championship resulted thus: No. 6, B Coy., 79; No. 15, D Coy, 49½ and No. B Coy., 44.

Coonoor.

Inter-Regimental Tournament.—

A Company of the Lancashire Fusiliers won the cup for the team competition and Boy Walker, of the Lancashire Fusiliers, the cup for the best boy competition.

Boys, Competition, Class A.—

Final:—Boy Armstrong,Loyals, beat Boy Mullender, Royal West Kent on points.

Team Competitions, Light Heavyweight.—

Lce.-Cpl. Wildman, Lancs.,Fus.,beat Cpl. Reece, Loyals, on points.

Lightweight:—Fus. Phillips, Lancs. Fus.,beat Fus. Berker, Lancs. Fus., on points.

Middleweight:—Fus. Thorley, Lancs Fus., beat Lce.-Cpl. Trolaw, Lancs Fus.,on points.

Featherweight.—Lce.-Cpl. Harding, Loyals, Fus. Clarkson, Lancs. Fus., on points.

Special Bantamweight.—Lce.-Cpl. Clay, IX, Lancers,beat Fus. Parkinson, Lancs Fus., on points.

Fus. Phillips, Lancs. Fus., beat Pte. Mody, Loyals, on points.

Pte. Flynn, Loyals, beat Fus., Jones,Lancs. Fus, on points.

Special Contest.—Pte. Cook,Loyals, beat Lce., Cpl. Taylor, Loyals on points.

Bantamweights.—Fus. Kershaw, Lancs, Fus., beat Fusilier Flynn, Lancs. Fus. on points.

First String Welters.—Fus. Billsborough, Lances. Fus., beat Pte. Barry, Loyals, on points.

Heavy weight.—Pte. Jones, Loyals, beat Lce.-Cpl. Ridings, Lancs. Fus.

Special Boy Contest.—Boy Walker, Lancs Fus., beat Boy Boughton, Royal West, Kent, on points

Special Lightweight.—Fus. Newall, Lancs. Fus., K. O. Cpl. Williams, Loyals, in the third round.

Class B. Boys.—Boy Jone, Lancs, Fus., beat Boy Hill, Lancs. Fus., the latter retiring in the third round.

Jubbulpore.

Army Team Competition.—

Bantamweight (Final)—L.-C. Williams (P. W. V.) beat Sgm. Hayes (R. Signals) on points.

Featherweights :—(Final)—Sgm. Hughes (R. Signals) K. O. Pte. Bluck (P. W. V.) in the third round.

Lightweights (Final) :—Pte. Jackson (P.W.V.) beat L-C. Bruton (R. Signals) on points.

Welterweights (Final)—Sgm. Crowley (R. Signals) beat Pte. Walsh (P. W. V.) on points.

Light Heavyweights (Final).—Cpl. Parker (R. Signals) beat Cpl. Tennent (R Signal points.

Middleweights (Final)—Dmr. Bagnall (P. W. V.) beat Gnr. Cullen (R. A.) on points.

Flyweight (Final).—Pte. M. C. Carthy (P. W. V.) beat Pte. Nelson (P. W. V.) on points.

Ahmednagar.

Inter-Regimental Tournament—

Novices, Class " A ".—

Featherweight—Winner : Pte. Lyford, " B " Coy. Runner up —Pte. Trayhorne, " HQ " Wing.

Lightweight—Winner :—Pte. Vickers, " H.Q" Wing. Runner up :—Pte. Fricker, " D " Coy.

Welterweight—Winner :— Pte. Blatchford, " HQ " Wing. Runner up :—L-Cpl. Marshall, " HQ " Wing.

Middleweight—Winner :— Dmr. Burrows, " HQ " Wing. Runner up :—Pt. Wilder, " B " Coy.

LightHeavy weight—Winner : —Bdsm. Gordon, " HQ " Wing. Runner up :—Pte. Walker, " HQ " Wing.

Novices Class " B "—

Bantam weight—Winner :—Pte. Laight, " B " Coy.

Light Weight—Winner :—Pte. Noakes, " A " Coy.

Middle Weight—Winner :—Pte. Parker, " A " Coy.

Boys' Competitions.—

Mosquito weight (under 7st 7lbs)— Winner:— Boy Wheeler, " HQ " Wing. Runner up :— Boy Avery, " HQ " Wing.

Flyweight—Winner :—Boy Pope, HQ " Wing. Runner up :—Pte. Hills, " HQ " Wing.

Bantamweight—Winner :—Boy Walker, " HQ " Wing, Runner up :—Boy Sewell, " HQ " Wing.

Middleweight—Winner :—Boy Lawrence (58), " HQ " Wing, Runner up :—Boy Lawrence (06), " HQ " Wing.

Special Four-round Contest—Winner :—Pte. Coker, " A " Coy. Runner up:—Pte. Burton, " D " Coy.

Battalion Championships.—

Bantamweight :—Cpl. Slate, " B " Coy., defeated L-Cpl. Brown, " D " Coy., the belt-holder.

Featherweight :—Pte. Evans, " A " Coy., defeated Pte. Berks, " C " Coy., the belt-holder.

Lightweight :—L-Cpl. Cole, " HQ " Wing, retained the tille against Cpl. Godall, " C " Coy., the challenger.

Heavyweight :—Pte. Hammond, " C " Coy., defeated Pte. Bull, " A " Coy., the belt-holder.

The " Good-Loser's" Prizes :—

Dmr. Lewin, " HQ " Wing—Class " A " Novice, Welterweight.

Pte. Hope, " A " Coy.—Class " A " Novice, Welter Weight.

Boy Lavalette, " HQ " Wing—Boys' Competition Bantamweight.

Lucknow.

Lucknow Brigade Team and Individual Championships :—

Heavyweight :— Finals :—Trp. Newman (3rd Hussars) W.D.O. Dmr. Baker (R. Berks) who scratched onMedical Grounds.

Light Heavy Weight.— Final.—Rfn. Thiede (60th Rifles) beat Pte.Pocket (R. Berk) on points.

Middle-Weight.— Final.—Trp. Walter (3rd Hussars) beat Rfn. Brooks (60th Rifles) on points.

Welter-Weight, Final.—(First String) Rfn. Hearsey (60th Rifles) beat Far. Capel on points.

Welterweight, (Second String) Final —Cpl. Willoughby (3rd Hussars) beat Lcl-Cpl. Hemmings (R. Berks) on points.

Lightweight Final.—Trp. Dripdale (3rd Hussars) beat Rfn. Sly (60th Rifles) on points.

Featherweight, Final.—Rfn. Stroud (60th Rifles) beat Sgr. Fox (R.A.) on points.

Bantamweight, Finals :—Tpr. O'Malley (3rd Hussars) beat Lce-Cpl. Usher (60th Rifles) on points.

Individual Contests.—

Middle Weight, Final :—L/Cp. Valter beat Pte. Spilsbury on points.

Welter Weight, Finals :—Rfn. Hearsey beat Cpl. Willoughby on points.

Light Weight, Final :—Tpr. Drysdale (3rd Hussars, beat Pte. Weeks (R. Berks, on points. Cpl. Green (60th Rifles) scratched from the Semi-final on medical grounds

Bantam Weight Finals.—Tpr. O'Malley (3rd Hussars) beat Rfn. Anderson (60th Rifles) on points.

Quetta.

East Lancs Novices Tourney.—

Lightweight, Final.—Pte. Bailey beat Pte. Senior on points.

Bantam Weight, Final.—Pte. Connor knocked out Pte. Williams in the first round.

Welterweight, Finals.—Pte. Arley beat Pte. Roberts on points.

Featherweight, Final :—Pte. Brown beat Pte. Bowers on points.

Middleweight, Final :—Pte. Childs beat Pte. Ballard on points.

Light Heavyweight, Final :—Cpl. Fielding knocked out Pte. Cooper in the second round.

Special prizes were awarded to Pte. Walsh Pte. Kemp, Pte. Dryden, Pte. Grenagan and Cpl. McLean.

Baluchistan District Tournament.—

Novice Bantamweight:—Pte. Wilson (E.L.R.. beat Fus. Stewartson (R. W. F.) on points.

Pte. Manning (E. L. R.) beat Cpl. Jones (R W. F.) on points.

Novice Flyweight :—Fus. Cousins (R.W.F.) beat Pte. Cromewn. (E. L. R.) on points.

Novice Featherweight :—Fus. Thomas (R W.F.) best Fus. Barnes (R. W.F.) on points. This fight was hard to decide and extra round was fought. Thomas just won by a narrow margin.

Novice Lightweight :—Pte. Ashwoth (E. L. R.) beat Pte. Walsh (E. L. R.). The referee stopped the fight in the second round as Walsh was sent to the boards six times.

Novice Welterweight :—Gunner Symons. (R. A.) beat Fus. Priestly, (R. W. F.) on points

Novice Middleweight :—L.-Cpl. Kent (R. W. F.) beat L.-Cpl. James (R. W. F.) on points.

Noice Light-Heavyweight :—Gunner Timms, (R. A.) beat Fus. Edwards (R. W.F.) on points.

Boys Contest :—Boy Reid (E. L. R.) beat Boy Butterwell (R. W. F.) on points.

Boy Smith (E. L. R.) knocked out Boy Harris (R W. F.) in the first round

Novice Bantamweight :—Pte. Manning (E L. R.) beat Pte. Wilson (E. L R.) on points

Open Flyweight :—Pte. Connor (E. L. R.) knocked out Cpl. Taylor (E.L.R.) in the rfist round.

Open Featherweight :—Pte. Hoare (E. L. R. beat Fus. Stanton (E. W. F.) on points.

Open Lightweight :—Pte. Grimes (E. L.R.) knocked out L.-Cpl. Smith (E. L. R.) in the first round.

Open Middle-weight :—Fuse Teague, (R. W. F.) beat L.-Cpl. Griffiths (R. W. F.) on points.

Open Light-Heavyweight ;—L.-Cpl. Nedderman (R. W. F.) beat Bdr. Scott (R. A.) on points.

Open Heavyweight :—Fus. Winnan (R.W.F.) beat L.-Bdr Avery (R. A.) on points.

Lahore.

Lahore District Regimental Team Tournament—
Seaforth Highlanders beat 4/7th Dragoon Guards.

Team Events—

Bantamweight :—Pte. Dixon, Seaforths, beat Farr Jones, 4-7th D. G. on points.

Featherweight :—Cpl. Mitchell, Seaforths, beat Tpr. Palmer 4/7th D. G. on points.

Lightweight :—Pte. Gorman, Seaforths, beat Tpr. Lote 4-7th D. G. on points.

Welterweight :—Pte. Duncan, Seaforths, beat Farr Simpson, 4/7th D. G., on points.

Pte. McCluskey, Seaforths, beat Tpr, Zegat 4-7th D. G. on points.

Middleweight :—Pte. McKenzie, Seaforths, beat Tpr. Arnold, 4-7th D. G. on points.

Light Heavyweight :—Pte. Riach, Seaforth beat Tpr. Smith, 4-7th D. G.

Individual Contests.—

Bantamweight :—Fus. Board, R. F. knocked out L.-Cpl. Burgess, Hants. in the first round

Pte. Vallence. Hants, knocked out Piper Clinton, R S. F. in the first round.

Featherweight :—Fus. Smith R. F. beat Pte. Page, Seaforths on points.

Cpl. Hadden, D. L. I. knocked out Gunne-Ware, R. A. in third round.

Pte. McManus, Seaforths, knocked out Fus. Good, R. F., in the first round.

Gunner Dare, R. A., beat Pte. Graves, D. L. I on points.

Pte. Gorman, Seaforths, beat Tpr. Lote, 4/7th D. G. on points.

Welterweight :—Fus. Winn, R. F. beat Bdsm. Farelly, Hants on points.

Pte. Mc Cluskey, Seaforths beat Pte. Styles, Hants, on points.

Bantamweights.—Pte. Dixon (Seaforth Highlanders) beat Fusilier Board (Royal Fusiliers). Dixon connected with both hands all the time and put his man out early in the second round.

Featherweight :—Corporal Mitchell (Seaforth Highlanders) beat Bugler Taylor (Durham Light Infantry) Mitchell appeared to be an old hand and knocked out his man with a hard right to the jaw in the first round.

Lightweight :—Private Gorman (Seaforth Highlanders) beat Corporal Phillips (Rifle Brigade). Phillips was no match for Gorman who floored his opponent for the full count in the first round.

Welterweight :—Duncan (Seaforth Highlanders) beat Davis (Hampshire Regt.) Davis retired in the first round with a damaged hand.

Middleweight :—White (Hampshire Regi ment) beat Dewsell (Royal Fusiliers) White used both hands to advantage and Dewsell took the count in the first round.

Light-heavyweight :—Private Riach (Seaforth Highlanders) beat Lance-Corporal Fitzgerald (Hampshire Regiment) Riach forced the pace. The winner gained his verdict on points.

Heavyweight.—F. S. Byman (Scotch Fusiliers) beat Private Ireland (Hampshire Regiment). Byman was too strong for his opponent and forced the pace, but was worried by Ireland's occasional lefts. Ireland took the count in the third round

Murree.

Murree. Murree Hills Tourney.—

Flyweights. Final :—Bdsmn. Jones (4/7th) beat Pte. Westnedge who retired in the first round with a damaged hand.

Featherweights, Final :—Bowless (Surreys) beat Codling (R. A.F.) on points.

Lightweights, Final :—Levy (Sussex) beat Theobald (Signals) on points.

Welterweights, Final :—Beard (Sussex) beat Simpson (4/7th) on points Another good fight.

Middleweights, Final :—Sampson (23rd Fd. Bde.) beat Shepherd (Surreys) on points.

Heavyweights, Final :—Crease (Sussex) beat Rowlands (Surreys) on points.

Bantamweights, Final :—Tpr. Palmer (4/7th) beat Farr. Sweeny (4/7th) on points.

Light Heavies, Final :—Gnr. McAvoy (17th Lt. Bty.) w.o. Fus. Hayton (5th Fusrs.) scratched on medical grounds.

Mussoorie.

Army Championships.—

Bantamweight :—Rfm. Williamson (Camerons) beat Fus. Stanfield (Royal Irish Fusiliers) on points.

Featherweight :—Cpl. Alexander (Royal Scots Fusiliers) beat Pte. Jones (Dorsetshire Regt. on points.

Lightweight :—Cpl. Preston (Royal Irish Fusiliers) beat Pte. Levy (Sussex Regt.) on points.

Welterweight.—Sgt. Mahoney (Royal Irish Fus.) beat Sgt. Jones (4th Hussars) on points.

Team Finals.—

Bantamweight :—Cpl. Moss (Gloucestershire Regt.) beat Pte. Dixon on points.

Featherweight.—Pte. Lindsay (Seaforth Highlanders) K.O. Pte. Norris (Gloucestershire Regt.) in the first round.

Lightweight :—L.-Cpl. Vrushkeen (Gloucestershire Regt.) beat Pte. Hill (Seaforth Highlanders) on points.

Welterweight :—Pte. Gorman (Seaforth Highlanders) beat Pte. Newbiggin (Gloucestershire Regt.) on points.

Second Welterweight :—Pte. Hayfield (Seaforth Highlanders) beat Pte. Light (Gloucestershire Regt.) on points.

Middleweight :—Pte. Duncan (Seaforth Highlanders) beat Pte. Coleman (Gloucestershire Regt.) on points.

Light-Heavyweight :—Pte. Mackenzie (Seaforth Highlanders) beat L.-Cpl. Shakespeare (Gloucestershire Regt.) on points.

Heavyweight.—L.-Cpl. Edwards (Gloucestershire Regt.) beat L.-Cpl. Waters (Seaforth Highlanders) in the third round, the referee stopping the fight.

Public School Finals.—

Lightweight :—P. McDermott (St. George's College) beat W. Keating (St. Fideli's School) on points.

Heavyweight :—R. Shields (Christ Church Boys' High School) beat W. Aitkins (St. Fidelis' School) on points.

Flyweight :—Pte. Clarkson (2nd K. O. Y. L. Infy) K.O. Pte. Connor (East Lancs. Regt.) in the third round.

Lightweight :—Pte. Grimes (East Lancers Regt.) beat Far. Simpson (4/7th Dragoon Guards) on points.

Flyweight :—L. Doyle (St. George's College) beat Lotter (Christ Church Boys' High School) on points.

Featherweight :—M. Robbins (St. Fideli's School) beat D. McDermott (St. George's College) on points.

Lightweight :—P. Doyle (St. George's College) beat W. Perrier (St. Fideli's School) on points.

Weatherweight :—S. Simon (St. Fideli's School) beat H. Randall (St. George's College) on points.

Welterweight.—H. Herd. (St. George's College) beat J. Sampson (Christ Church Boys' High School) on points.

Heavyweight :—T. Wate (St. George's College) beat P. Robbins (St. Fideli's High School) on points.

Army Individual Finals.—

Flyweight :—L.-Cpl. Morgan (Seaforth Highlanders) beat Bosm. Jones (4/7th) Dragoon Guards) on points.

Bantamweight :—Fus. Faulkner (Royal Irish Fusiliers) beat Pte. Vallence (Hampshire Regt) on points.

Featherweight :—Pte. Hill (Seaforth Highlanders) beat L.-Cpl. Shields (East Lancs. Regt.) on points.

Lightweight :—Cpl. Preston (Royal Irish Fus.) beat L.-Cpl. Goodall (Sherwood Foresters) on points.

Welterweight :—Pte. Newbiggin (Gloucesters) beat Pte. Holmes (Hampshires) on points.

Middleweight :—L.-Bdr. Ward (13th Mdty. R. A.) beat L.-Cpl. Gilson (Royal Fus.) on points.

Light Heavyweight :—Bdr. McDonald (I. Bty. R. H. A.) beat Dmr. Hayton (Northumberland Fus.) on points.

Heavyweight.—Fus. Byman (Royal Scots Fusiliers) K.O. L.-Cpl. Webb (4th Q. O. Hussars) in the first round.

Oorgaum.

Kid Charlie k. o. Richardson in the third round.

Rawalpin di

District Championships.—

Team Championships.—

Welterweight :—Corpl. Beard, R. Sussex, beat Lance-Corpl. Burns, R. Sussex.

Bantamweight :—Pte. Simpson, E. Surreys, beat Pte. Rodney, R. Sussex.

Featherweight :—Dmr. Bowles, E. Surreys, beat Pte. Turner, R. Sussex.

Lightweight:—Lance-Corpl. Cooper, E. Surreys, beat Pte. Levy, R. Sussex.

This fight was one of the best of the evening and the crowd were surprised when Cooper got the decision.

Middleweight :—Pte. Jones, R. Sussex, lost to Lance-Corpl. Reeves, E. Surreys.

Light Heavyweight :—Pte. Fookes, E. Surreys, beat Pte. Brunswick, K. O. R. R.

Heavyweight :—Pte. Crease, R. Sussex, beat Pte. P. Owle, K.O R. R.

Placings in the team championships were as follows :—

2nd Bn. King's Own Royal Regt. 13 points
2nd Bn. the Royal Sussex Regt. 28 points
1st Bn. East Surrey Regt. 30 points.

Individual Championships—

Bantamweight, Final :—Pte. Block, E. Surreys, lost to Pte. Simpson, E. Surreys.

Lightweight, Final :—Lance-Corpl. Tapp, R. Sussex, w.o. Gur. Smith, R.A.

Middleweight, Final :—Lance-Corpl.Sheppard, E. Surreys, beat Pte. Bentley, K.O.R R.

Featherweight, Final—Pte. Millward, K O R.R., lost to Dmr. Bowles, E. Surreys

Flyweight, Final :—Pte. Dawson, E. Surreys, beat Bdsm. Harrison, K.O.R.R

Welterweight, Final :—Lance-Corpl. Williams, E. Surreys, lost to Corpl. Beard, R. Sussex.

Lightheavyweight, Final —Gnr. Perkins,R.A.; lost to Pte. Fookes, E. Surreys.

Heavyweight, Final —Pte. Crease, R. Sussex, lost to Pte. Moore, R. Sussex

PIG STICKING.

Delhi.

Kadir Cup.—

1. Captain Richards (R.A.) on Centaur
2. Major Mason MacFarlane (R.A.) on Love lace.

Heavy Weight Hoghunter's Cup.—

1. Capt. J. A. Herbert (A.D.C. to H. E he Viceroy) on Glenar.
2. Mr. Clement (4th Hussars) on Oobe.

Lightweight Hoghunter's Cup.—

1. Major Marriott, V. C. (R.A.) on Harlequin.

Muttra.

DANGANLI BAGH.

Muttra Cup.—

4th Hussars 'B' six kills in six runs.

The Muttra Tent Club "A" Muttra Tent Club "B," 4th Hussars "A" and Calcutta Tent Club each had five kills out of six runs to their credit.

TENNIS.

Bombay Gymkhana Tournament.—

The following is a list of the prize winners:—

Marryat Cup :—

Winner :—A. M. D. Pitt. Runner up M. Fox.

Men's Singles "A" :—Winners B. Butterfield. Runner-up A. M. D. Pitt.

Men's Singles "B" :—Winner J. E. Moir, Runner-up W. H. Cummings.

Ladies' Doubles :—Winners Misses Webber. Runners-up Mrs. Freke and Mrs. Waud.

Men's Doubles :—Winners R. Sephton and J. Raper. Runners-up C. G. Freke and E. Rose.

Veteran's Doubles :—Winners S. M. Lahey Bean and L. Biggwither.

Mixed Doubles :Winners Mr. and Mrs. Moir. Runners-up R. G. Hopkins and Mrs. Keith.

Bombay Western India Championships—

Men's Singles : A. M. D. Pitt beat Morley Fox, 6-4, 6-2.

Men's Doubles : Tomonaga and Ueda beat Khardehar and Suvarna, 6-2, 6-3.

Ladies' Singles : Mrs. B. C. Covell beat Miss Evans, 6-4, 6-1.

Ladies' Doubles : Mrs. Covell and Mrs. Main beat Mrs. Race and Miss Evans, 6-2, 6-1.

Mixed Doubles : Mrs. Moir and A. M. D. Pitt beat Miss Evans and Tomonaga, 6-3, 3-6, 6-4.

Bombay Presidency Hard Court Tournament.—

Men's Singles : Final.—Raja Iyer beat Wagle 6-4, 6-4.

Ladies' Doubles, Final.—Mrs. Clayton and Miss Kent beat Miss O. Stebbing and Miss M. Stebbing, 4-6, 6-2, 6-1.

Ladies' Singles, Final.—Mrs. Clayton beat Mrs. Jones, 3—6, 6-1, 6-1.

Men's Doubles, Final—Pitt and Kamruddin beat Wagle and Suvarna 6-2, 7-5.

Bombay Gymkhana Handicap Tournament—

"A" Singles, Final : B. Butterfield (+3/6) beat A. M. D. Pitt (—40) 6-8, 7-5, 6-4

Marryat Cup : Final : A. M. D. Pitt beat M. Fox, 6—1, 6—3.

"B" Singles : Final : Moir (scr.) beat Cummings (—3/6) 6-1, 6-4.

Men's Doubles : Final : Sephton and Raper (+15) beat Freke and E. Rose (—3/6) 6-1, 2-6, 6-2.

Veteran's Doubles : Final : Biggwither and Lahey Bean (+5/6) beat Tofts and 6-1, 6-1.

Delhi and Army Championships.—

Results :—

Army Singles, Winner Fl.Lt. Mockler.

Army Doubles, Winners Colonel M. Saunders and Major J. G. Smyth (general staff A. H. Q.).

Men's Singles Championships, Winner Sohanlal

Ladies' Singles, Winner Miss Beckingham.

Doubles Championship, Winners Bishambar Dayal and Johnson.

Mixed Doubles Championship Winners Jagat Mohanlal and Miss Gibson.

Ladies' Doubles Championship Winners Miss Beckingham and Mrs. Heathcoat.

Men's Single Handicap, Winner Parkashlal.

Ladies' Singles Handicap, Winner Mrs. McKenna.

Men's Doubles Handicap Winners Hardie and Bird.

Mixed Doubles Handicap Winners Mrs. Pinhorn and C. D. Noyes.

Men's Singles Handicap (Final) : Parkashla beat Sohanlal.

Ladies' Singles Handicap (Final) :—

Mrs. McKenna w.o. Mrs. Lumby.

Delhi Championships Mixed Doubles (Final) Jagat Mohanlal and Miss Gibson beat Mrs. Lumby and Smyth.

Men's Doubles (Final) :—Bishambar Dayal and D. Johnston beat J. G. Smyth and L. S. Deane.

Poona ; Poona Open Tennis Championships.— Men's Singles Final.—N. B Bhagwat beat D. G. Powar 9-7, 6-3.

Ladies' Singles Final.—Mrs. Doyle beat Mrs. Stephens, 6-3, 6-4.

Poona : Deccan Gymkhana Tournament.—

Men's Singles—Final.—Powar beat Vartak; 6-2, 6-3

Men's Doubles, Final.—Khardekar and Survana beat Powar and Parkar, 6-1, 6-4.

Mixed Doubles, Final.—Miss Cursetji and Khardekar beat Miss Browne and Laxton 6-2, 4-6, 20-18.

Jubbulpore : Jubbulpore Tournament.—

Men's Singles (Handicap) : Final.—Roy (—40) beat Major Meredith (—15 4-6), 6-2, 6-3..

Men's Singles, Open Final.—Major Meredith beat Roy, 6-4, 7-5, 4-6, 4-6, 7-5.

Men's Doubles Handicap (Final)—Roy and Naidu (—40) beat Capt. Clapp and Capt. Murray (—15 4-6) 9-7, 6-4.

Men's Doubles: Open Final.—Roy and Naidu beat Shaw and Bailey, 1-6, 6-4, 6-3, 6-1.

Mixed Doubles, Handicap Final.—Mrs. Sansem and Capt. Woolner (—15) beat Mrs. and Mr. Phillips (—30 4-6) 6-0, 6-4.

Mixed Doubles: (Open) Final.—Mrs. Oxley and Capt. Murray beat Mrs. Richardson and Major Pocock 6-3, 6-4.

Ladies' Doubles: Open Final.—Mrs. Richardson and Mrs. Phillips beat Mrs. and Miss Oxley 6-2, 6-0.

Lahore: Punjab Championships.—

Ladies' Doubles: Final.—Mrs. Gough and Mrs. Gibson beat Mrs. Dodd and Mrs. Beckingham 3-6, 6-3, 6-4.

Calcutta—

Men's Doubles: S. Okamato and Ueda beat Jagat Mohan Lal and P. L. Mehta, 6-2, 6-2, 6-3.

Ladies' Singles.—Miss Jean Sandison beat Miss Stork: 6-2, 6-3.

Cossipore Hard Court Tournament—

Mixed Doubles: G. Perkins and Miss J. Sandison beat N. Gregory and Mrs. McKenna 12-10, 4-6, 6-4.

Ladies' Singles: Miss J. Sandison beat Mrs. McKenna 6-2, 6-3.

Men's Doubles: A. J. Garland and R. C. Macinnes beat G. Perkins and P. G. Wells.

Naini Tal: Autumn Touring—

Men's Open Singles, Final.—Kishen Prasad beat S. W. Bobb 6-0, 8-10, 6-4.

Men's Open Doubles, Final.—Smyth and Deane beat Toogood and Collins 8-6, 6-3.

Mixed Open Doubles, Final.—Smyth and Mrs. Lumby beat Bobb and Mrs. Ross 6-3, 6-0.

Men's Handicap Doubles, Final.—Linton and Dawson (scr.) beat Sinha and Joshi (+15/3) 6-4, 6-2.

Ladies' Handicap Doubles, Final.—Mrs. Goldney and Miss Ingram (+3/6) beat Mrs. Cook and Mrs. Smythies (—3/6) 6-1, 7-5.

Naini Tal: Lawn Tennis Tournament—

Men's Open Doubles.—Final: Ahad Hussain and Careless beat Maharaj Singh and Jasbir Singh, 4-6, 6-4, 6-4.

Mixed Open Doubles.—Jasbir Singh and Mrs. Perse beat Mr. and Mrs. Deane 7-5, 6-1.

Ladies' Open Singles. Final: Mrs. Perse beat Mrs. Ross, 6-2 6-1.

Ladies' Open Doubles.—Final: Mrs. Cook and Mrs. Perse beat Mrs. Ross and Mrs. Smythies 2—6, 8-6, 6-3.

Mixed Handicap Doubles.—Final: Mr. and Mrs. Smythies (scr.) beat Ashfaq and Mrs. Austen Brown (—15), 6-2, 7-5.

Ladies' Handicap Singles.—Final: Mrs. Mylne (+3/6) beat Miss Dreyfus (+15/3), 6—2, 6—1.

Ladies' Handicap Doubles.—Final: Mrs. Perse and Mrs. Smythies (scr.) beat Mrs. Mylne and Mrs. Hewett (scr.) 6-3, 6-3.

At the end of play Mrs. G. B. Lambert gave away Cups and Prizes to winners and runners-up.

HOCKEY.

Calcutta—All India Inter-Provincial Tournament.—

U. P.	3 goals.
Rajputana	1 goal.

Calcutta: All-India Inter-Provincial Tournament

United Provinces	3 goals.
Rajputana	1 goal.

Calcutta Belghton Cups.—

Telegraphs Recreation Club	2 goals.
Calcutta Customs	*Nil.*

Calcutta.—

Olympic Team	3 goals.
Rest of India	1 goal.

Bombay.—

Olympic X1	6 goals.
Bombay X1	1 goal.
Bombay X 1	3 goals.
All India Olympic Team	2 goals.

Aga Khan Cup, Bombay.—

Poona Rangers	2 goals.
Bhoota Singh's XI	1 goal.

Shaiba Shield, Bombay.—

Warwicks H. Q. Coy.	3 goals
'D' Coy Bombay Battn.	2 goals

Buchanan Cup: Bombay.—

G. I. P. Railway	2 goals.
Catholic Gymkhana	*Nil.*

M. C. C. Tournament, Madras.—

M. and S. M. Ry. Rifles	1 goal.
M. C. C.	*Nil.*

Madras District British Army Cup, Madras.—

Lancashire Fusiliers	2 goals
Royal West Kents	*Nil.*

District British Army Cup., Madras.—

2nd Batt. Lancashire Fusiliers	2 goals
Royal Artillery	1 goal.

Murree Tourney, Murree—
- King's Own .. .. 1 goal.
- East Surreys .. .. .. *Nil.*

Luxman Cup, Poona—
- Poona Rangers .. .. .. 3 goals.
- Kirkee Sports Team .. .. .. *Nil.*

Poona Aga Khan Cup, Poona—
- Cheshire Regiment .. .. .. 2 goals.
- G. I. P. Rly. Rifles .. .. .. 1 goal.

Islam Tournament, Poona—
- Ordnance Club Kirkee .. .. 2 goals.
- Poona Police .. .. 1 goal.

District Tournament, Ahmednagar—
- The Loyal Regt. .. .. .. 3 goals.
- Middlesex Regt. .. .. .. *Nil.*

Brigade Tournament, Ambala—
- 4-12 F. F. Regiment .. .. .. 2 goals.
- 10-15th Punjab Regiment .. .. 1 goal.

Red Triangle Cup, Bangalore—
- St. Joseph's College .. .. .. 2 goals.
- Amateur, Seniors .. .. .. *Nil.*

All-India Zamir Cup, Delhi—
- Town Hall Club, Shahjahanpur .. 2 goals.
- Muslim University, Aligarh .. .. 1 goal.

Ram Lal Tournament, Lucknow—
- B. Y. Associatian, Lucknow .. .. 3 goals.
- Jhansi Heroes .. .. .. 1 goal.

Punjab Championship, Lahore—
- M. T. Chaklala .. .. .. 1 goal.
- N. W. Railway .. .. .. *Nil.*

Hindley Cup, Lahore—
- E. B. R. .. .. 3 goals.
- N. W. R. .. .. 1 goal.

Murree Brewery Cup, Murree—
- Staff College .. .. 4 goals.
- Baluchi Club .. .. 3 goals.

Madrasee Military Service Memorial Shield, Nagpur—
- Morris College .. .. .. 3 goals.
- Roman Catholic Athletics .. .. 1 goal.

Datt Chowdry Memorial Shield, Nagpur—
- Anwarul Islam, Kamptee .. .. 3 goals.
- Satpuras, Nainpur .. .. .. *Nil.*

Cadet Cup, Quetta—
- East Lancs . .. . 2 goals
- Western Command .. .. .. 1 goal.

Raja Narsinhgirji Cup, Secunderabad—
- N. G. S. Rly. .. .. 2 goals.
- Coronation Club A .. .. .. 1 goal.

Garrison Inter Coy. Tourney (Indian Section), Secunderabad—
- 3-19th Hyderabad Regt. .. .. 5 goals.
- 3-6th Rajputana Rifles .. .. 2 goals.

Garrison Young Soldiers, Tournament, Secunderabad—
- 3-19th Hyderabad Regt. .. .. 5 goals.
- 8th K. G. O. Light Cavalry .. .. 1 goal.

Delhi.
- Indian Olympic XI .. .. .. 3 goals.
- Ajmere .. .. 1 goal.

- Indian Olympic X .. .. .. 2 goals.
- Delhi Assn. XI .. .. .. *Nil.*

ROWING.

Bombay.

Bombay Gymkhana Regatta—

Gymkhana Challenge Cup:—Bombay Gymkhana: C. M. Cock, J. A. E. Low, A. W. Percy, W. L. Clarke and W. G. Taylor (Cox) beat Royal Connaught Boat Club, Poona, E. J. D. Young, M. D. Lister, E. M. Blake, D. S. Gibbs and G. B. Phipps (Cox) by a canvas.

Haig Brown Cup:—Bombay Gymkhana E. H. Palin, F. Morris and W. G. Taylor (Cox) beat Royal Connaught Boat Club, E. M. Blake, D. S. Gibb and G. P. Phipps (Cox) by 2 feet.

Double Sculls:—Royal Connaught Boat Club, E. J. D. Young and M. D. Lister beat Bombay Gymkhana, B. Walwyn and A. Wren by 2 lengths.

Club Pairs:—A. W. Percy and G. G. C. Adami beat C. M. Cock and J. E. A. Low by 1¾ length.

Club Fours:—Adami's Crew, R. C. Lawson, H. W. Nicholson, A. W. Percy and G. G. C. Adami with G. L. Archard, (Cox) beat Whitby's crew S. R. Randall, G. U. Pottinger, C. L. Slater, B. J. Whitby with H. F. Stackard (Cox) by 3 lengths.

Invitation Race:—Goldrich and Walwyn beat Wren and Harrington by ½ length.

Poona.

Senior Pairs ¾ mile (Final):—Standley and Melville beat Steven and Smith. Time—5 minutes 16 secs.

Junior Sculls: ½ mile (Final):—Thrupp beat Jenkins. Won by 4 lengths. Time—3 minutes 59 seconds.

Mixed Fours: ¼ mile (Final):—Miss Speedy's Crew beat Miss Freeth's Crew. Won by ½ length. Time—1 minute 48 seconds.

Mixed Double Sculls: ½ mile (Final):—May (Bow) Mrs. May (Stroke) and Miss Colier (Cox) beat Worlledge (Bow) Mrs Worlledge (Stroke) and Mrs. Williams (Cox). Won by 2 lengths. Time—3 minutes 59 seconds.

Junior Fours: ½ mile (Final):—Signal School 'A' beat Royal Artillery. The Crews were:

Signal School 'A' Walch (Bow) Melville, Button, Bower (Stroke) and Young (Cox).

Royal Artillery: Jenkins (Bow) Lyons, Jenkins, Lowndes (Stroke) and Norman (Cox). Won by 1½ lengths. Time—3 minutes 7 seconds.

Canoe Race:—200 yards: (1) Miss D. Freeth and Captain Cole, (2) Miss K. Freeth and Kelsall.

Challenge Eights: 1 mile:—Army Signal School beat Royal Engineers and Pioneers (combined). The Crews were:

Army Signal School: Standley (Bow) Melville, Walch, Fergusson, Cox, Bower Burton, Young (Stroke) and Hoseason (Cox.)

R. E. and Pioneers: Horsefield (Bow) Broadbent, Blake, Fayle, Cam, Gibb, Philbrick, Wolferstan (Stroke) and Robertson (Cox).

In the Novices Pairs Walch and Cox scratched to Cholmely and Gunning.

Deccan College Regatta—

The following are the Regatta finals—:

Champion Single Sculls.—Y. R. Tiperis.

Clinker Fours.—Mr. Geerzada's crew.

College Open Fours (Senior).—Mr. Geerzada's crew.

Doubles.—Mr. Savnur's crew; Mr. Geerzada's crew.

College Junior Fours.—Mr. Ghatge's crew.

Club Senior Fours.—The Carnatic Club.

Club Junior Fours.—VIII Club.

Ladies' Open Fours.—Miss Rustomji's crew.

Royal Connaught Boat Club Regatta.—

Novices Fours.—Army Signal School "B" team (Walker, Lyall Grant Battye, Firbank and Saw) beat the Royal Artillery (Lowndes, Proes, Robertson, Justice, and Hallifax). Time, 3 minutes 21 seconds which lowers the present record by 7 seconds. Distance ½ mile.

Senior Sculls.—Wolferstan beat Broadbent. Time 4 minutes 51 seconds, which has lowered the previous best by 5 seconds. Distance ¾ mile.

Ladies' Double Sculls.—Miss Graham, Miss Burke and Young beat Miss Grant, Miss Loring, and Giblin in 2 minutes 15 seconds over ¼ mile course.

Challenge Fours.—Royal Connaught Boat Club (St. Aubyn, Gibb, Blake, Wolferstan, and Phipps) beat Bombay (Cock Lowe, Slater, Whitby, and Taylor). Time 4 minutes 53 seconds Distance ¾ mile.

Karachi.

The "York & Lancaster" Cup—Won by the Merchants by 2 feet in 2 minutes 33 seconds.

Merchants:—Bow. A. M. Thomson, 2. A. S. Taylor, 3. C. J. Damala, Str. P. S. Green, Cox. R. C. Macleay.

Services: Bow D. J. R. Moore, 2. T. N. Shelton, 3. C. L. Gilbert, Str. G. L. Worthington, Cox. F. B. Ludlow.

The "Garbett" Cup.—Worthington beat P. S Green by 1½ lengths in 2 minutes 54 seconds.

Club Fours: A. S. Taylor's Crew beat Damala's Crew by 1¼ lengths in 1 minute 27 seconds.

A. S. Taylor's Crew: Bow, D. J. R. Moore, 2. W. F. Dry, 3. W. A. Stagg, Str. A. S. Taylor Cox, Miss Cosser-Smith.

C. J. Damala's Screw: Bow. A. M. Thomson 2. W. F. Priestley, 3 T. N. Shelton, Str. C. J. Damala, Cox, Mrs. Shelton.

Flag Fours:—The Royal Air Force beat The Sherwood Foresters by 1½ lengths in 1 minute 25 seconds.

Royal Air Force: Bow. W. A. Stagg, 2. W. F. Dry, 3. C. L. Gilbert, Str. G. L. Worthington, Cox, Miss Cosser-Smith.

Sherwood Foresters:—Bow. G. Bond, 2. N. H. Thompson, 3. D. J. R. Moore, Str. H. G. Fowler, Cox. Miss Nightingale.

BADMINTON.

Bombay.

Sir Chunilal Mehta Cup, A.—
Malabar Club 'A.'

SWIMMING.

Bombay.

Breach Candy Bath's Gala.—

Push Tyre Race.—1 A. L. Ross.

Ladies. One Length.—Miss Zoe Gordon, 2 Miss E. Jameson.

Two Lengths.—1 D. McClumpha, 2 A. L. Ross.

Men's Diving.—1 B. Kost, 2 R. Carey, 3 E. Dale.

Mixed Team Race.—1 Miss Zoe Gordon, Messrs. Dale and Ross, 2 The Bul-Buls. (Miss E. Jameson, Messrs. McClumpha and Carey.)

Merchants' Cup.—Heat 1 W. H. Brady & Co. Time—1 min. 25 secs. Heat 2 Netherlands Bank. Time—1 min. 26 secs. Heat 3 Mackinnon Mackenzie, Ltd. Time—1 min. 36 secs.

Final.—1 Netherlands Bank, 2 W. H. Brady Co. Time—1 min. 29 secs.

Blindfold Race.—1 A. Ardagh.

Scramble for Corks, Ladies.—Miss Peggy Gordon and Miss E. Mason tied with 15 corks each. A spin of the coin decided the event in favour of Miss Gordon.

Ladies' Diving.—1 Miss E. Jameson, 2 Miss Weber.

Obstacle Race.—1 D. McClumpha, 2 H. Kelly.

Water Polo.—Blues 2, Whites 2.

Teams.—Blues, Flower, Lulofs and Ardagh; Velthorst, Vast, McClumpha and Kelly.

Whites.—Sneddon, Picot and Navarra, Ross. Carey Dale, and Hyam.

Bombay Swimming Club Gala :—

Boys under 16 years (1 Length).—1 N. Carey, 2. Haskell. Time 23 4-5 secs.

Men's Diving (Open).—1 C. Murray, 2 R. Brown, 3 C. Velthorst.

Ladies' 2 Lengths.—1 Miss Z. Gordon, 2 Miss P. Payne. Time—53 2-5 secs.

Obstacle Race.—1 McClumpha, 2 Murray.

Ladies' 1 Length Handicap :—1 Miss A. Mason, 2 Miss Z. Gordon.

Relay Race.—1 Bombay Swimming Club, 2 B. B. R. A. Time—1 min. 12 4-5 secs.

Collecting Corks. Ladies :—Miss Z. Gordon.

Tug-of-War.—1 "Hot Dogs."

Affinity Race.—1 Murray and Miss Gordon. 2. Ezra and Miss Mason.

Girls' 1 Length.—1 Miss B. Tomlinson, 2. Miss E. Gordon. Time 24 4-5 secs.

Men's 2 Lengths Handicap.—1 T. Brown. 2. D. Vast, 3 Johnson.

Ladies' 1 Length Club Championship.—1 Miss Z. Gordon, 2 Miss P. Payne. Time—21 1-5 secs.

Men's 2 Lengths, Open.—1 D. Hay, 2 Haskell. Time 42 1-5 secs.

100 Yards Club Championship.—1 D. Mc Clumpha, 2 Velthorst, 3 C. Murray. Time 64 1-5 secs.

Ladies' Diving.—1. Miss E. Jameson, 2. Miss Z. Gordon.

Pillow Fight—1 Bebbington.

Men's 1 Length Breast. 1 Length Back.—1. D. McClumpha, 2. Murray. Time.—50 2-5 secs.

Back Bay Gala.—

One length Scratch (Boys under 16) 1. K. Sherren. 2. N. Haskell.

One Length Scratch (Girl under 16) 1. Miss E. Wainscott. 2. Miss B. Tomlinson.

Two Lengths Handicap : (Men members).

Heat 1. (1) Johnson. (2) Lulloff.

Heat 2. (1) Vast, (2) Ardagh.

Heat 3. (1) McClumpha, (2) MacDonald.

Final : (1) Vast. Time 46 2/5 secs. (2) Mc Clumpha 39 secs.

(The above timings are the net timings).

Diving Championship : (Men members) (1) Murray, (2) Carey, (3) Velthorst.

Pillow Fight ; (Men members) (1) Mac Donald, (2) Lulloff.

Two Lengths Scratch : (Members Barred) (1) Flower, (2) Sulleman, (3) Stone.

Balloon Race ; (Mixed members) : (1) Miss Mason (Jr.) and Vast.

200 Yards Championship for the Back Bay Bath Co.'s Cup : (Men members) (1) Mc Clumpha, (2) Todd, (3) Vast. Time 2 mins. 35 2/5 secs.

One Length Polo Ball Dribble : (Men members) (1) Carey, (2) Allen.

Duck Race : (1) Ash, (2) Vast.

Service Race : Two Lengths Scratch : (Open to H. M's. Forces) (1) Cpl. Boyes, (2) L./Cpl. Clerke.

Relay Race : (Open to teams in the European Water Polo League).

Heat 1. (1) B. S. C., (2) Cathedral High School.

Heat 2. (1) Bombay Gymkhana, (2) B. B R. A.

Final: B. S. C., (2) Bombay Gymkhana.

In a race in which the competitors were allowed to prevent their opponents from making progress Wilson came first and Ezra second.

WATER POLO MATCH.

Whites .. .. 4 goals.
Blues .. .. 3 goals.

Bombay Challenge Shield—

Bombay beat Poona.

Men's Diving: 1. Ezra (B. S. C.) 2. Velthors (B. S. C.)

Ladies' One Length : 1. Miss Emery (Poona) 2. Miss P. Payne (Bombay). Time 21 secs.

Men's Relay Race. 1. Bombay. 2. Poona. Time 1 min. 48 4-5 secs. Teams :—Bombay. Velthorst, Carey, Dale, Todd, Gast and McClumpha. Poona : Cook-Hurle, Birch, Taylor, Brewin., Wilson and Carruthers.

Ladies' Diving. 1. Miss Ockleford (Poona). 2. Miss Emery (Poona).

Men's Two Lengths. 1. Carey (Bombay), 2. Velthorst (Bombay). Time 39 2-5 secs.

Ladies' Relay Race: 1. Poona, 2. Bombay. Time 1 min. 38 secs. Teams.—Poona : Misses Pettigrew, Ockleford, Willstrop and Emery. Bombay.—Misses Pearl and Beryl Payne, A. Mason and Peggy Gordon.

Men's 100 Yards: 1. D. McClumpha, 2 Todd (Bombay). Time 1 min. 3 4-5 secs.

Ladies' Two Lengths: 1. Miss Emery (Poona), 2. Miss Pearl Payne (Bombay). Time 50 2-5 2-secs.

Bombay *vs.* Poona.—

Men's 100 Yards.—1 McClumpha, B. S C. 2 Ross, B. S. C. Time—68 1-5 secs.

Ladies' Diving.—1 Miss S. Emery, O. E. B. C. 2. Miss Ockleford, O. E. B. C.

Ladies' 66 Yards :—1. Miss S. Emery, O. E. B. C. 2. Miss Z. Gordon, B. S. C. Time 54 2-5 secs. (Record).

Men's 66 Yards :—1. Velthorst, B. S. C. 2. Carey, B. S. C. Time 43, 4-5 secs.

Men's Diving. —1 Velthorst, B. S. C. 2. Leadbeter, O. E. B. C.

Ladies' 33 Yards :—1. Miss S. Emergy, O. E. B. C., 2 Miss Z. Gordon, B. S. C. Time 22 4-5 secs. (Record).

Men's Relay .—1 Bombay Swimming Club. Time.—1 min. 57 secs.

Ladies' Relay.—1 Ordnance Estate Boat Club. Time—1 min. 54 4-5 secs.

Bombay Swimming Club 14 points.
Ordnance Estate Boat Club 12 points.

Poona.

Cheshires *vs.* Ordnance Club.—

100 Yards.—1. Williams (Cheshires), 2. Buckworth (Cheshires).

66 Yards.—1. Sheen (Cheshires), 2 S. Payne (Boat Club).

33 Yards.—1. Carroll (Cheshires). 2. Taylor (Boat Club).

Diving.—1. Carroll (Cheshires). 2, R. Brewin (Boat Club).

Relay Race :—Cheshires.

Ladies' Diving :—Miss Ockleford.

Ladies' 33 Yards Race.—1. Miss Ockleford.

2. Miss Brown & Miss Pettigrew. Dead heat.

Annual Competition—

Men's 100 Yards.—1. Ordnance Estate Boat Club. 2. 22nd Cheshire Regiment.

Men's 66 Yards.—1. 22nd Cheshire Regiment 2. Ordnance Estate Boat Club.

Men's Diving.—1. 22nd Cheshire Regiment. 2. 22nd Cheshire Regiment.

Men's 33 Yards.—1. Ordnance Estate Boat Club. 2. 22nd Cheshire Regiment.

Ladies' Diving.—1. Miss Ockleford. 2. Miss S. Emery. 3 Miss Pettigrew.

Ladies' 66 Yards (Handicap).—1. Miss M. Taylor. 2. Miss P. Taylor.

Ordnance Club Races—

The results were :—

Ladies' Open Race.—1 Miss S. Emery. 2. Miss P. Taylor. 3. Miss Wilstrop.

Ladies' Handicap Race.—1. Miss S. Emery 2. Miss Ockleford

Ladies' Diving.—1. Miss Ockleford ; 2. Miss Pettigrew.

Men's Open Race.—1. Passfield. 2. R. Brewin.

Men's Handicap Race.—1. Kettleband 2. Passfield.

Men's Diving :—1. Passfield 2. Leadbeater.

Calcutta.

13 Miles. (Barrackpore to Calcutta)—

The first three were :—Nalin Chandra Malick, 1; Abani Bhusan Bannerjee, 2; and Amullya Charan Das, 3. A feature of the race was that a boy of seven, Balaidas Sarkar from Benares, finished the course.

Lucknow.

13 Miles Provincial Competition—

1. Mannu Lal—3 hrs. 14 mts. 5 secs.
2. Ranigandra Manick.
3. Rampada Banerjee.

BILLIARDS.

Poona.

Smallman Snooker Cup,—
"A" Coy. Cheshires .. .. 761 points. | Poona Rifles, A.F.I. .. .. 739 points

RUGBY.

Bombay.

Bombay Rubgy Tournament—
Bombay Gymkhana "A" (1 goal) .. 5 points.
Poona, R. F. C. .. .. .. *Nil.*

Calcutta.

All India Tournament—
Bombay (1 penalty goal 2 tries) .. 9 points.
Calcutta (1 try) .. .. .. 3 points.

Poona.

Poona Tournament—
Bombay Gymkhana (3 tries) .. 9 points
Cheshires .. .. *Nil.*

Madras.

Madras Tournament—
Ceylon .. .. *Nil.*
2nd Battl. Lancashire Fusiliers .. *Nil.*
(Each team will hold the Cup for 6 months.)

CHESS.

New Delhi

All India Championship—

1. Sultan Khan 8½
2. S. V. Bodes 6
3. N. J. Roughton 5
4. Gurbakhsh Rai 4¼
5. V. N. Gadre 4¾
6. N. R. Joshi 4
7. Ramsukh Kaka 4
8. V. K. Khadilkar 3½
9. M. J. Mehendale (*alias* Morbhat) .. 2½
10. Manzur Hasan 2½

TENT PEGGING.

Lahore.

Indian Cavalry Team and Section Tent Pegging.—

1. 8th K. E. O. Cavalry.. .. 74 points.
2. 19th K. G. O. Lancers and 4th D. C. O. Hodson's Horse tied with .. .. 70 points.
3. Sam Brown's Cavalry .. .. 68 points.

MOTORING.

The following are the results of the Endurance run organised by the W. I. A. A. on April 6th over a course of 264½ miles from Bombay to Poona *via* Nasik :—

Motor Cycles.

1st Class Awards :—R. B. Mody (A. J. S.) and D. V. Vartak (Norton).

2nd Class Awards :—P. Rodgers (Triumph), D. P. H. McCormack (Sunbeam), and P. Venkatachalapathy (A. J. S.). Each lost 2 marks.

Motor Cars.

1st Class Awards :—H. Brearley (Bugatti) M. D. Petit (Lancia Lamda), J N. Wadia (Wolseley), R. Britton (Standard), A. Chard (Chevrolet), M. M. Slade (Whippet), A. G Wozencroft (Lewis), A. Rahimtulla (Nash), and C. R. Davis, H. W. Sidley, R. G. Whittle C. W. Smith, and F. D. Wadia (All Fiats).

2nd Class Award :—J. H. Osborne (Wolesley),

3rd Class Award :—N. N. Katrak (Fiat.)

RIFLE SHOOTING.

Calcutta.

Calcutta Miniature Rifle Association Annual Competition.— The scores were :—

Calcutta Scottish "A" 842; Birds Rifle Club 757; Royal Engineers, No. 1 Field Co. 736; E. B. Rly. Kanchrapara Workshop 704.

Meerut.

Annual Championship of India—

The Chief prize winners were :—

King's Medal :—Rifleman A. Lewis, 1st King's Royal Rifle Corps.

British Army Championship, A. R. A. Gold Jewel :—Rifleman A. Lewis, 1st King's Royal Rifle Corps.

Indian Army Championship, Magdala Gold Medal :—L. Naik Nandabahadur Thapa, 1-5th Royal Gurkhas.

Indian State Forces Championship, A. R. A. (India) Gold Jewel:—Q. M. Daffadar Dolsingh, Jodhpur Sardar Risala.

The Priestley Memorial Medal :—L.-K Nandabahadur Thapa, 1-5th Royal Gurkhas.

National Rifle Association Silver Medal :—Rfn. A. Lewis, 1st K. R. R. C. John Pinche's Silver Marksmanship.

Medal :—L. Nk. Nandabahadur Thapa, 1-5th Royal Gurkhas.

A. R. A. (I) Silver Medal, British Officers :—Captain R. B. Hoggett, East Lancashire Regt.

A. R. A. (I) Silver Medal, British Sergents :—A.-Q. M. S. A. Erskine, Small Arms School.

A. R. A. (I) Silver Medal. Other Ranks. Rfn. A. Lewis, 1st K. R. R. C.

A. R. A. (I) Silver Medal. Auxiliary Force, Cpl. V. Alexander, 1st M. and S. M. Railway Rifles.

A. R. A. (I) Silver Medal. Indian Officers:—Subdr. Isa Khan, 10-12th Frontier Force Regt.

A. R. A. (I) Silver Medal. Indian Army:—L.-Nk. Nandabahadur Thapa, 1-5th Royal Gurkha Rifles.

A. R. A. (I) Silver Medal. Indian State Forces; Q. M. Dfr. Dolsingh, Jodhpur Sardar Risala

A. R. A. (I) Silver Medal Indian State Forces:. Naik Kehar Singh, 1st Patiala Infantry.

A. R. A. (I) Silver Medal Territorial Forces: 2-Lt. K. Nehru, 11-7th Rajput Regt.

Kolar.

"C" Company, No. 1 Team :—Captain M. J. Williams 24+25=49, C. S. M. C. H. McCosh 26+36=62, Corpl. J. W. Davids 23+39=62 Corpl. M. H. Freeman 28+33=61, Corpl. E. A. Thomas 24+24=48, Sergt. P. McCosh 22+23=45 Pte. R. McCosh 30+33=63. Pte G. L. Carter 28+32=60. Totals 450.

"A" Company Team :—Lt.-Col. G. Benn White 24+21=45, Regtl. Sergt.-Maj. F. Newing 29+38=67, Pte. C. E. Paul 25+24=49, Corpl. W. E. Thomas 25+26=51, Sergt. C. A. Paul 28+35=63, L.-Corpl. H. Thomas 28+21=49, C. S. M., W. G. Wells 28+23=51, Sergt. W. G. Joseph 23+23=46. Totals 421.

Who's Who in India.

ABDUL HAMID, KHAN BAHADUR DIWAN, Bar-at-Law, C.I.E., O.B.E., Chief Minister, Kapurthala State. *b.* 15 October 1881. *m.* a daughter of Khan Sahib Sheikh Amir-ud-Din, retired Extra Asstt. Commissioner in the Punjab. *Educ.:* Government College, Lahore. State Magistrate, 1908; Judge, 1909; Supdt. of the Census Operations, 1911; Head of the Executive and Revenue Depts. as Mashir Mal; Fellow of the Punjab University; Lately Member, Punjab Legislative Council; Chief Secretary, March 1915; Chief Minister, 1920. Received Coronation Darbar Medal (1911); Khan Bahadur (1915), O.B.E. (1918); C.I.E. (1923). *Address:* Kapurthala.

ABDUL KARIM, MAULAVI, B.A., M.L.C., Government pensioner and Member, Council of State. *b.* 20 Aug. 1863. *m.* Ayesha Khatun of Calcutta. *Educ:* Sylhet and Calcutta. Started as a teacher in the Calcutta Madresah; Assistant Inspector of Schools for Mahomedan education for about 15 years; Inspector of Schools, Chittagong Division, for about five years. Member, Council of State. *Publications:* History of India for Beginners in English, Bengali, Hindi, and Urdu; Students' History of India; The Mahomedan Empire in India in Bengali; Hints on Class Managements and Method of Teaching in English; and Mahomedan Education in Bengal (English). *Address:* 1311, Wellesley Square, Calcutta.

ABHEDANANDA, HIS HOLINESS SREEMAT SWAMI, PH. D. (New York); President, Ramakrishna Vedanta Society, Calcutta, Spiritual Teacher, Lecturer and Author. *b.* Oct 2, 1866. *Educ:* Calcutta University. Disciple of Sri Ramakrishna Paramahansa and a spiritual brother of Swami Vivekananda. Went to London, in 1896 to lecture on Hindu Philosophy (Vedanta). In 1897 went to New York, U. S. A., and organised the Vedanta Society of New York. Lectured before educational Institutions, societies and universities for twenty-five years in England, America and Canada. Returned to Calcutta in 1921 and established the Ramakrishna Vedanta Society of which he has been President since and also of Ramakrishna Vedanta Ashrama at Darjeeling. *Publications:* Reincarnation; Spiritual Unfoldment; Philosophy of Work; How to be a Yogi; Divine Heritage of Man; Self Knowledge; (Atma Jnan) India and her People; Gospel of Ramakrishna; Sayings of Ramakrishna; Human Affection and Divine Love; Great Saviours of the World, and a number of pamphlets in English and Bengali; Founder and Editor of "*Biswa-Bani,*" an illustrated Bengali monthly Magazine of the R. K. V. Society. *Address:* 40, Beadon Street, Calcutta.

ACHARYA, M. K., B.A., L.T., M.L.A., Public Worker and Journalist. *b.* 1876. *m.* Rukmani Ammal, in 1894. Two sons. *Educ.* at the Madras Christian College. Lecturer, 1896 to 1902; Head Master, 1902-1917; independent political worker since 1917. *Publications:* Portaits from Indian Classics, A Hand-Book of Morals, "Kumuda" a drama, "Dasaratha" a tragedy, "Shri Krishna Karna Mrita," "The" Basy Bhunder in the reconstruction of Indian Chronology by Orientalists, Struggle for Swaraj; etc., elected as a Member to the Indian Legislative Assembly by the Chinglepet *cum* S. Arcot Non-Mahomedan Constituency in 1923 and 1926. A prominent Member of the Swaraj Party and the Congress. *Address:* 46, Lingha Cheti Street, Madras, E.

ADVANI, MOTIRAM SHOWKIRAM, Kaiser-i-Hind Gold Medal (1919); President, Hyderabad Educational Society. *b.* 12 October 1868. *m.* Margaret Annesley, *d.* of the late Rev. Charles Voysey. *Educ.:* The Albert School and Presidency College, Calcutta. Barrister (Inner Temple), 1892; Practised in Karachi, 1892-1904; Assistant Judge, Hyderabad, 1904; Acted as District Judge, Hyderabad, 1905, Permanent District Judge, 1911. Served in Thana, Surat. District Judge, Broach, 1917-1922 and District Judge, Nasik, until June 1924. *Address:* No. 6, Bungalow, Cantonment, Hyderabad, Sind.

AFSUR-UL-MULK, AFSUR-UD-DOWLA, AFSUR JUNG, MIRZA MAHOMED ALI BEG, NAWAB, Lieut.-Col.; K.C.I.E. (1908); C.I.E., (1897); M. V. O. (1906); A.D.C. to Nizam of Hyderabad; Chief Commander, H.E.H. the Nizam's Regular Force, 1916; *b.* Aurangabad (Deccan); *o. s.* of late Mirza Vilayet Ali Beg. *Educ.:* Aurangabad. Rissaldar, Hyderabad Contingent; Commander, Golconda Brigade, since 1885; Hyderabad Imperial Service Troops, since 1893 (both of these he raised); Commander, Regular Troops, since 1897, Chief Commander since 1916, served in the Afghan War, 1879-1880; Black Mountain Expedition, 1888; China Expedition, 1900; received title of Afsur Jung, 1884; and of Afsur Dowla, 1895; raised to Afsur-ul-Mulk, 1903; Hon. Col., 20th Royal Deccan Horse; on Staff, Imperial Service Cavalry Brigade, Indian Expeditionary Force, Egypt, 1915; on Staff, Indian Cavalry Corps and A.D.C. to Sir John French, France, 1915-16. Appointed Major-General H. E. H. the Nizam's Regular Troops in 1927. *Address:* Rahut Munzil, Hyderabad (Deccan).

AGA KHAN, AGA SULTAN MAHOMED SHAH, G.C.I.E. (1902); G.C.S.I. (1911); G.C.V.O. (1923); K.C.I.E. (1898); LL.D., Hon. Camb: *b.* 1875; Brilliant Star of Zanzibar, 1900, 1st Class; has many religious followers in East Africa, Central Asia and India; head of Ismail Mahomedans; granted rank and status of first class chief with salute of 11 guns in recognition of loyal services during European War. *Publication:* India in Transition. *Addres* Aga Hall, Bombay.

AGARWALA, LALA GIRDHARILAL, B.A., Advocate, High Court, Allahabad, Member First Legislative Assembly. *b.* 16th Feb. 1878, *m.* sister of Lala Banwari Lal Gupta, B.A., LL.B., Vakil High Court, (Muttra). *Educ:* Agra College, B.S.M., London. Moved resolution in Legislative Assembly *re* Indian Governors, Chief Justices, etc., 27th Sept., 1921 at Simla and Bill to remove inequalities between Vakils and Barristers. Was Director, Moradabad Spinning and Weaving Mills for 10 years, and of Babrala Cotton Gin and Press Co., Ltd., for 6 years ; original member, U. P. Chamber of Commerce ; Secry., U. P. Hindu Sabha. Elected Member of the Royal Society for Encouragement of Arts, Manufacture and Commerce, and of the Royal Asiatic Society, London, in 1909, elected Member, of first Bar Council, Agra Province, President, Agarval Seva Samiti (Social Service and Scouting). *Publications:* an Article *re* use of aircraft during war in "Legtimite de la Guerre Aerienne," Proposed legislation for protection of Cows and improvement of Cattle in India. Hindu Home and Temple in London, and Parallel Agra Tenancy Act 1926 ; Member, Hindu Law Research Society, Member, of Court, Benares Hindu University, *Address:* 33, George Town , Allahabad.

AGA SHAH ROOKH SHAH, Nawab Shah Rookh Yar Jung Bahadur (1923). *b.* 1874, eldest *s.* of Aga Akbar Shah ; *g.s.* of H. H. the First Aga Khan. *m. e. d.* of Aga Shahabuddin Shah (1897). *Educ.* English and Persian. Hon. A.D.C. to H. E. H. the Nizam of Hyderabad. 1918 ; Hon. Private Secretary to H. H. the Aga Khan 1900 ; President, Poona Suburban Municipality 1925-1928 ; Elected President in 1928. Founder and President, Servants of Islam Society, Poona 1926 ; Founder and President, Faiz Ul-Islam Club, Poona 1925 ; Director Queen Mary's Technical School, for Disabled Indian Soldiers, Kirkee 1923; Member of Committee, Society for the Prevention of Cruelty to Animals, Poona 1926; Member of Committee, Released Prisoners, Aid Society, Poona 1927, Fellow, Royal Society of Arts (London). *Address:* 11, Connaught Road, Poona.

AHMAD, DR. ZIA-UDDIN, C.I.E., M.A., Ph. D., D.Sc., M.L.C., Pro. Vice-Chancellor, Muslim University, Aligarh. *b.* 1878. *Educ.:* Aligarh, Trin. Coll., Cambridge. (Sir Isaac Newton Scholar), Gottingen (Ph. D.) and Allahabad (D.Sc.), Member of Calcutta University Commn.; Pro. Vice-Chancellor. *Address:* Muslim University, Aligarh.

AHMED, KABEERUD-DIN, M.L.A., Bar-at-Law and Advocate, Calcutta High Court ; Landholder. *b.* 1886. *Educ.:* at the Malda Govt. High English School and at Magdalene College, Cambridge. Called to the Bar in 1910 ; Founder of Bengal Jotedars and Raiyats' Association and its Hon. Secretary ; takes great interest in agriculture ; was elected Presdt., Bengal Agricultural Confce. in 1917 ; Director, Darjeeling Himalayan Tea Co., Ltd., Calcutta ; Organiser, Founder and President, Indian Seamen's Union, Calcutta ; elected member, Bengal Legislative Council in 1920 ; elected member, Legislative Assembly, 1921-23; 1924-28, re-elected again in 1927 for the Rajshahi Division ; Founder of Parliamentary Muslim Party in Indian Legislative Assembly, 1925 and its whip; Member, Central National Mahomedan Assoc. Calcutta : Member Governing Body of Indian Rationalistic Society, Calcutta : Member Democratic Party in Indian Legislature, 1921-24, Vice-President, Anjumani Woizani, Bangala, *Publications:* Handbook of Equity, Roman Law, etc. *Address:* 7 Old Post Office Street, Calcutta ; Bishwanathpur, Kansant P.O. Malda (Bengal).

AHMED, KHAN BAHADUR KAZI AZIZUDDIN, C.I.E., O.B.E., I.S.O., Chief Minister, Datia State. *b.* 7 April 1861. *Educ.:* at Gonda High School. *m. d.* of Mirza Mahomed Ismail Subordinate Judge, Gonda, 1893. Served in the P. C. S., U. P. for 34 years during which time acted as Magistrate and Collecter, Bulandshar and Asstt. Director of Agriculture and Commerce, U. P. ; was on deputation with His Majesty the late Amir of Kabul during his Indian tour ; services lent to Bharatpur State in 1910 for employment as Rev. Member of Council of Regency ; transferred to Dholpur, 1913 and retired from Government service in 1920 but continued to serve Hi Highness the Maharaja of Dholpur as Judcial Minister; appointed Chief Minister, Datia, in 1922. Is member of the Court of the Delhi University & Aligarh University and Trustee, Agra College & Member, Royal Asiatic Society, London, State Scout Commissioner for Datia State, President, St. John Ambulance Association and Red Cross Society, Datia State Centre. Awarded by the Grand Priory, St. John's Gate, London an insignia on admission as an Associate Serving Brother of the Venerable Order of the Hospital of St., John of Jerusalem. *Publications:* Author of about 40 books in English and Urdu including life of H. M. King George V. and H. R. H. the Prince of Wales, Commentaries on Criminal Procedure Code and U. P. Land Revenue Act ; translated into Urdu at the request of Government of India proceedings of the War Conference. 1919 and History of Coronation Durbar, 1911. *Address:* Datia.

AHMED, SAIYID ASHREFUDDIN, KHAN BAHADUR NAWABZADA, C.I.E., (1925) ; Member, Bihar and Orissa Legislative Council and Vice-President, Bihar and Orissa Haj Committee. *b.* 6 Jan. 1855. *m.* eldest *d.* of M. Fida Ali Khan of Bihar and Orissa Provincial Civil Service. *Educ:* Calcutta Madrassa and Doveton College, Calcutta. Appointed A.D.C. to the last King of Oudh, 1874 ; Manager of Hooghly Imambara, 1875 ; retired from latter post in 1917 ; one of the life trustees of Aligarh University and Fellow of Calcutta University. nominated member, Legis. Assembly, in 1927. *Publications:* Tuhfai Sukhan, Nauratan, Yadgar Durdana and Tabaqat Mohsinia and several other books in Persian and Urdu. *Address:* Nawab Kothi, Barh, E. I. R. Rly., Patna.

AIKMAN, DAVID WANN, C.I.E. (1912), Consulting Engineer to the Cawnpore Improvement Trust. *b.* 8 December 1863. *Educ.:* Cooper's hill. *m.* Marion Drummond Stewart. Joined P. W. D., 1885. Retd., 1918. *Publica-*

tion: Roorkee treatise on water supply, Consulting Engineer for the Cawnpore Water-Work, etc. *Address:* Charleville, 2, Simla: and 18, Clyde Road, Lucknow.

AINSCOUGH, THOMAS MARTLAND, C.B.E. (1925), M. Com., F.R.G.S. His Majesty's Senior Trade Commissioner in India and Ceyl. *b.* 1886. *m.* Mabel, *d.* of the late W. Lincolne of Ely, Cambs. *Educ.:* Manchester Gr. School, Switzerland and Manchester University. In business in China, 1907-12; Spl. Commissioner to the Board of Trade in China, 1914; Sec., Board of Trade Textile Committee, 1916; Sec., Empire Cotton Growing Committee, 1917; Expert Assist. to Persian Tariff Revision Commission, 1920. Member of the Royal Asiatic Society, Central Asian Society and Fellow of the Royal Society of Arts. *Publications:* "Notes from a Frontier." *Address:* Bengal Club, Calcutta.

AIYANGAR, CHETLURU DURAISWAMI, B.A., B.L., High Court Vakil, Chittoor and Member, Legislative Assembly. *b.* 1873. *Educ.:* Madras Christian College and Law College. Schoolmaster for two years; then Vakil from July 1899; occupied offices of President, District Congress Committee, Dist. Conference, etc., President, Taluk Board and Chairman, Municipal Council, Chittoor, for some years. *Publications:* Estates Land Act in Telugu; Sri Venkatesa or the First Archa; Gandhi Unveiled. *Address:* Chittoor.

ALI, A. F. M. ABDUL, M.A. *b.* 1884. Son of Nawab Bahadur Abdul Latif Khan, C. I. E. *Educ:* St. Xavier's, Doveton College, Calcutta. Founder of Moslem Institute, Calcutta, Founder and Editor of the Journal of the Moslem Institute. Joined Bengal Civil Service, 1906; placed on special duty, Political Department, Bengal, as Special Press Censor, Septr. 1918 to March 1919; Police Magte., Alipore, September 1921 to March 1922; Appt. Keeper of the Records of the Govt. of India and *Ex-Officio* Assistant Secretary to the Govt. of India, April 1922. Secretary to the India Historical Records Commission; Trustee and Honorary Secretary of the Indian Museum; Fellow, Calcutta University; Member of the Court of the Dacca University; Member, Executive Committee of the Countess of Dufferin Fund. Vice-President, Rotary Club of Calcutta. *Address:* 3, Turner Street, Calcutta.

ALI, KHAN BAHADUR MIR ASAD, Merchant Jagirdar *b.* August 1879. *m.* to Leakut-Anisa Begum, *d.* of Nawab Ali Yaver Jung, Bahadur of Hyderabad (Deccan). *Educ.:* Nizam Coll., Hyderabad. Hon. Magte., Madras, 1912. Member, Imperial Legislative Council, 1913-20; Member, Legislative Assembly, 1921-23; Presdt. Elect, Dist. Political Confce. of Buddapat, 1916. Presdt. Elect, Dist. Political Conference Malabar, 1918; Presdt., Provincial Educational Confce., Poona, 1919; Presdt., Madras Presidency Muslim League, 1917-20; Presdt.-Elect of All-India Unani Confce., Delhi, 1917. President, Unani-Ayurvedic Confce., Hyderabad, 1922. *Publications:* "Maasharat," Urdu translation of the *Use of Life* by Lord Avebury. Member, Cosmopolitan Club; retired from Public Life, 1927. *Address:* Banganapalle.

ALI, MOHAMED. *b.* December 1878. *Educ.:* Rampur State School; Bareilly High School, M. A. O. Coll., Aligarh; and Lincoln Coll., Oxford. Chief Educational Officer, Rampur (State), (1902-03); H. H. the Gaekwar's Civil Service (1904-1910); Editor and Proprietor of the *Comrade*, weekly English newspaper (Calcutta 1911-12, Delhi 1912-1914) and of the *Hamdard*, Urdu daily newspaper (Delhi) 1913-1915); Interned under the Defence of India Act at Mehrauli, Lansdowne, and Chhindwara (1915-19); Confined in Betul (C. P.) Jail (June to December 1919) under Regulation III of 1818; sentenced to two years' rigorous imprisonment, Nov. 1921; Head of the Indian Khilafat Delegation to Europe (Feb. to Oct. 1920); Founded the All-India Muslim League in 1906; Khuddam-i-Kaaba Society in 1913 and the National Muslim University, Aligarh, 1920. *Publication:* "Thoughts on the Present Discontent" (1908). *Address:* Sultan Mansion, Dongri, Bombay.

ALI, SHAUKAT. *Educ.:* M.A.O. Coll., Aligarh (Capt. Cricket XI). In Govt. Opium Dept. for 15 years. Sec. and Organiser, Aligarh Old Boys' Assoc. Trustee, M.A.O. Coll. Organised collection of funds for Aligarh University. Interned during the war. Prominent leader of the Khilafat movement, 1919-20, and of Non-co-operation movement. Sec., Central Khilafat Committee. Founder and Secretary of Kkuddam-i-Kaaba Society; *Address:* Sultan Mansion, Dongri, Bombay.

ALWAR, COLONEL H. H. RAJ RAJESHWAR SRI SEWAI MAHARAJ SIR JEY SINGHJI VEERENDRA DEV, SHRI MAHARAJ of. G.C.S.I. (1924); G.C.I.E. (1919); K.C.I.E. (1911); K.C.S.I. (1909); Colonel in the British Army, 1919; General-in-Chief of the Alwar State Forces, maintains State Forces which served in operations for relief of Peking 1900 and in Great War; represented India at the Imperial Conference, 1923. *b.* 1882, Son of H. H. Shri Sewai Maharaj Sir Mangal Singhji Dev, G.C.S.I. *Address:* The Palace, Alwar, Rajputana.

ANAGARIKA DHARMAPALA, The, Teacher and Preacher of Buddhist Ethics and Higher Psychology; General Secretary, Maha-Bodhi Society; Editor, Maha-Bodhi; Director-General, Buddhist Mission in England, *b* Sept. 17, 1864. Leading a Brahmachari life since his boyhood. *Educ:* Several private schools in Colombo under Christian missionaries and under Buddhist Bhikkhus. Renounced home in his 20th year to work for the welfare of humanity and the Religion of the Lord Buddha. Started the Maha Bodhi Society in May 1891. Headquarters at Buddhagaya, Gaya, Sarnath, Benares, Calcutta, Colombo, Kandy, and London. Travelled four times round the world. Was Buddhist especial Delegate at the Chicago Parliament of Religions in 1893. Erected the first Buddhist Dharmasala at Buddhagaya and the first Buddhist Vihara in Calcutta, and is now engaged in the Buddhist

Propaganda in London. Started the English Maha Bodhi and the Sinhalese weekly the "Sinhala Baudhaya" a popular democratic paper. *Publications*: Life of the Lord Buddha, What did the Lord Buddha teach, Psychology of Progress, Repenting God of Horeb; Relationship between Hinduism and Buddhism; the Arya Dharma. *Address:* 41, Gloucester Road, Regents Park, London, N.W. 1.; 4A, College Square, Calcutta; and Aloe Avenue, Colpetty, Colombo.

ANANTA KRISHNA AYYAR, The Hon'ble Mr. Justice Rao Bahadur C. V., B.A., B.L., Judge of the Madras Court. *Educ:* Madras Christian College and the Madras Law College; Carmichael and Innes Prizeman in Law. Apprenticed to the late Justice P.R. Sundara Ayyar. Enrolled as a Vakil of the Madras High Court, in 1898; Election Commissioner, 1921-23. Government Pleader, Madras, 1923-28. Acted as a Judge of the Madras High Court in 1928. Appointed Advocate-General, Madras, in March 1928; Elevated to the Bench as a permanent Judge in December 1928; Member of the Law College Council from 1921; First Chairman of the Madras Bar Council. *Address*: "Sweta Sadan", No. 1, Brodies Road, Mylapore, Madras.

ANDERSON, SIR GEORGE, KT. (1924), C.I.E. (1920), M.A. (Oxon.), Director of Public Instruction, Punjab, since 1920. *b.* 15 May 1876; *m.* to Gladys Alice Morony. *Educ.:* Winchester College, University College, Oxford. Transvaal Educational Department, 1902-1910; Indian Educational Service; Professor of History, Elphinstone College, Bombay; Assist. Secretary, Department of Education, Government of India; Secretary, Calcutta University Commission, 1918-19. *Publications*: The Expansion of British India; British Administration in India; Short History of the British Empire. *Address:* Grant Lodge, Simla.

ANDREWS, CHARLES FREER, Professor in the International University of Rabindranath Tagore at Santiniketan, Bengal. *b.* 12 February 1871. *Educ.:* King Edward's School, Birmingham and Pembroke College, Cambridge. Fellow and Lecturer of Pembroke College, Cambridge, 1899. Professor in St. Stephen's College, Delhi, and member of Cambridge University Brotherhood, Fellow and some time member of Syndicate, Punjab University from 1904 to 1913; since that date at Santiniketan, Bengal. *Publications:* "Christianity and the Labour Problem," "North India," "The Renaissance in India"; "Christ and Labour," "The Indian Problem," "Indians in South Africa," "To the Students," "The Drink and Drug Evil." Correspondent, *Manchester Guardian. Cape Argus, Natal Advertiser. Address:* Santiniketan, Bolpur, Bengal.

ANKLIKER, LT-COL. AMIR-UL-UMRA SARDAR SIR APPAJIRAO SAHIB SITOLE DESHMUKH, SENA HARDOO, SAH-SHRI, K.B.E. (1919); C.I.E. (1913); Member of the Gwalior Government in Department of Revenue, since 1918 and Vice-President, Council of Regency, (1925) *b.* 1874. *Educ:* Belgaum. Pte. Secretary to the Maharaja of Gwalior, 1897. *m* the youngest daughter of the late Maharaja Jayjirao Sahib Scindia of Gwalior. *Address:* Gwalior.

ANNESLEY, FRANCIS CHARLES, Merchant, Partner, Killick Nixon & Co., Bombay. *b.* 3 March 1879. *Educ.* at Birkenhead School, Cheshire. Joined firm of Killick Nixon of Bombay in 1906 after being engaged in various firms in Liverpool and London from 1895 to 1902 when came out to Bombay to the firm of James Mackintosh & Co. *Address:* Pali Hill, Bandra, Bombay.

ANSTEAD, RUDOLPH-DAVID, M.A. (Cambridge), C.I.E. (1927), Director of Agriculture, Madras Presidency. *b.* 1875. *m.* Louisa Lofting. *Educ.:* Giggleswick School and Christ's College, Cambridge. In 1901 joined the Imperial Department of Agriculture in the West Indies as Research Chemist, 1903-5; Sugar Chemist Barabados, 1905-9; Superintendent of Agriculture, Grenada, 1909; transferred to Indian Service as Scientific Adviser to the United Planters' Association of South India. In 1922 became Director of Agriculture. *Publications*: Various in Scientific and other Journals. *Address:* 21, Nungumbaukam High Road, Madras.

ARCOT, PRINCE OF, SIR GHULAM MAHOMED ALI KHAN BAHADUR, G.C.I.E. (1917), K.C.I.E. (1909). *b.* 22 Feb. 1882. *s.* fathes; 1903. Premier Mahomedan nobleman of Southern India, being descended from the former Mussulman dynasty of the Nawabs of the Karnatic. *Educ.:* Newington Court of Wards Institution, Madras. Member of Madras Legislative Council, 1904-6; Member of the Imperial Legislative Council (Mahomedan Electorate) of the Madras Presidency, 1910-13; Member of the Madras Legislative Council by nomination, 1916; President All-India Muslim Association, Lahore; President, South India Islamiah League, Madras. *Address:* Amir Mahal, Madras.

AROGYASWAMI MUDALIAR, The Hon. DIWAN BAHADUR RAYAPURAM NALLAVEERAN, B.A., B.C.E., Rao Bahadur (1915) and Diwan Bahadur (1925); *b.* 18th April 1870. *Educ.* Madras Christian College and College of Engineering, Madras. Entered service under Madras Government as Asstt. Engineer in 1896 and retired as Superintending Engineer in 1925. Minister for Public Health and Excise (resigned in March 1928) *Address:* Leith Castle, San Thome, Mylapore.

ASH, HERBERT DUDLEY, A.M.I.E.E., Director, Turner Hoare & Co., Ltd. *b.* 1879. *m.* Madeline Edith Ash. *Educ:* Haileybury College. Attached 29th Lancers, 1915-17; Staff Captain, Indian Cav. Brigade, 1917-19. Twice mentioned in despatches. *Address*: C/o Turner Hoare and Co., Ltd., Bombay.

ASTBURY, ARTHUR RALPH, C.I.E. (1928), Chief Engineer, Buildings and Roads Branch, Punjab P. W.D., and Secretary to Government Buildings and Roads and Hydro-Electric Branches, *b.* 5th June 1880. *m.* to Friede Hildegard von Schonberg. *Educ:* Westminster

and the Royal Indian Engineering College, Coopers Hill. *Address:* 55, Lawrence Road, Lahore and Torrentium Cottage, Simla, E.

ASTON, ARTHUR HENRY SOUTHCOTE, M.A. (Oxon), Additional Judicial Commissioner in Sind. *b.* 4 July 1874. *m.* to Lilian, *d.* of the late Col., A. R. Savile. *Educ.:* Harrow School, Balliol College, Oxford. Joined Lincoln's Inn; called to the Bar; read in Chambers with H. Tindal Atkinson, Esq., and G. R. Lowndes, Esq., practised as a Barrister, Bombay High Court, 1902; Public Prosecutor in Sind, 1906; Chief Presidency Magistrate, Bombay. 1906; Acting Additional Judicial Commissioner in Sind, 1920-23. *Publications:* Joint Editor, Starling's Indian Criminal Law (8th Edition); Editor (9th Edition). *Address:* The Ridge, Bath Islands, Karachi.

ATKINSON, LIEUT.-GENERAL SIR EDWIN HENRY DE VERE, K.B.E. (1921); C.B. (1918); C.M.G. (1917); C.I.E. (1913); Belgian Order of the Crown, 3rd Class; Belgian War Cross, Legion of Honour, 3rd Class; French War Cross; Military Order of Avis (Grand Officer); R. E. *b.* 19 Feb. 1867. *s.* of late E. F. T. Atkinson, C.I.E., I.C.S. *m.* 1896, Etheldred, *d.* of E. Steward, Winton House, Richmond, Surrey. one *s.* three *d.* *Educ.:* Charterhouse, Royal Military Academy, Woolwich. Obtained commission in the Royal Engineers, 1885; Capt., 1895; Major, 1903; Lt.-Co., 1910; Col., 1914; Brig.-Gen., 1816; Maj.-Gen., 1919; served in Lushai Expedition, 1889; Chin-Lushai Expedition, 1889-90; Zhob Valley Expedition, 1890, Instructor in Fortification at the R.M.A., Woolwich, 1896-99; Principal, Thomason Civil Engineering College, Roorkee, 1901-15; European War (C.R.E. 38th Division, France; Chief Engineer, 1st Army Corps, British Armies in France; Chief Engineer, 1st Army, British Armies in France), 1915-19; Mesopotamia (Chief Engineer, G.H.Q.; G.O.C. 6th Division (temp.); Adviser to Minister of Communications and Works, Iraq Government) 1919-21; Director of Military Works, and Engineer-in-Chief, India, 1921-24, Master-General of Supply 1924. *Address:* Army Headquarters, India, Simla.

AYANGAR, VALANGIMAN KRISHNASWAMI ARAVAMUDHA, M.A., (1914); Under Secretary, Commerce Department, Government of India *b.* 15th Dec. 1891. *d.* of Prof. K. R. Ramaswami Ayangar, Prof. of Mathematics, Engineering College, Madras; *Educ.* Kumbakonam Government College and Madras Presidency College. Office of the Accountant General, Madras; Personal Assistant to the Controller of Currency, Calcutta; Asstt. Secretary, Finance Department, Govt. of India; Jt. Secretary to the Royal Commission on Indian Currency and Finance; Under Secretary to Govt. of India, Finance Department; Member of the Joint Committee on the Reserve Bank of India Bill; Under Secretary, Commerce Department, Govt. of India. *Address:* B5, Bemloe Estate, Simla.

BABER, SHUM SHERE JANG BAHADOOR RANA, General of the Nepalese Army, G.B.E.; (Hon.Mil.) *cr.* 1919; K.C.S.I. (Hon.) *cr.* 1919; K.C.I.E. (Hon.) *cr.* 1916; Hon. Colonel, British Army (1927). *b.* 27 January 1888; 2nd *s.* of Maharaja Sir Chandra of Nepal. *m.* 1903, Deva Vakta Lakshmi Devi; 2 *s.* 2 *d.* Director-General, Police Forces, Katmandu, since 1903; was present at the Delhi Coronation Durbar, 1903; visited Europe, 1908; was in charge of shooting arrangements during King George's shoot in Nepal, Terai, 1911; attached to the Army Headquarters, India (March 1915 to February 1919) as Inspector-General of Nepalese Contingents in India during the Great War (Despatches, specially; thanks of Commanders-in-Chief in India; K.C.S.I., K.C.I.E., for Meritorious Service; received the 1st class Order of the Star of Nepal with the title of Supradipta Manyabara, 1918; the thanks of the Nepalese Government and a Sword of Honour); European War (Waziristan Field Force, 1917) Despatches; special mention by Commander-in-Chief in India and Governor-General in Council; the Nepalese Military Decoration for bravery; (the British War and Victory Medals); at Army Headquarters, India, as Inspector-General of Nepalese Contingent during Afghan War, 1919; (Despatches G.B.E.; India General Service Medal with Clasp). Represented Nepal at the Northern Command Manœuvres (Attock, Nov. 1925). In memory of his son Bala Shum Shere supplied (1921) Pokhara, a hill-station in Nepal, with pipe drinking water at a cost of over Rs. 1,00,000. *Address:* Baber Mahal, Katmandu, Nepal, *via* India.

BAGCHI, SATISCHANDRA, B.A., LL.D., Bar-at-Law; Principal, University Law College, Calcutta. *b.* Jan. 1882. *Educ.:* Santipur Municipal School, Calcutta; St. John's College, Cambridge, B.A., Calcutta University, 1901; B.A., LL.B., Cambridge and Dublin; LL.D., Trinity College, Dublin, 1907: Fellow, Calcutta University, 1909; Tagore Professor of Law, 1915: called to Bar, Gray's Inn, 1907. *Address:* Principal's Quarters, Darbhanga Buildings, University Law College, Calcutta.

BAIG, SIR ABBAS ALI, K. C. I. E., (1917), C. S. I., (1912), B. A., LL.D., Fellow of the Bombay University. Naib Diwan, Baroda. *m.* 1st Ayesha, *d.* of Shaikh Mira of Wai (*died*). one *s.* 2nd 1901, Allia, *d.* of Shaikh Ali Abdulla 4 *s.* *Educ.:* Wilson College. Dy. Educational Inspector, Hindustani Schools, Bombay Presidency, 1882; Dewan, Janjira State, March 1886 to March 1890; admitted to the Statutory Civil Service, 1890; Asstt. Coll. and Magte., 1890-92; on special duty in the Junagadh State, January to April 1893; offd. as 4th Presidency Magte., April 1893; appointed Oriental Translator to Government, June 1893; Reporter on the Native Press; Registrar of Indian Publications; Secretary, Civil and Mil. Examination Boards, 1894-1906; appointed Dewan of Junagadh State, July 1906 to 1910; Talukdari Settlement Officer, July 1906; Member of the Council of India, June 1910-17; LL.D., Glasgow, 1912; Commissioner of Income-tax, 1915-17; Represented Bombay Univ. at the Congress of Universities of Empire, 1912; on Special Political duty in Egypt in connection with the war, 1914-15; Vice-President, Conucil of India, 1916-17. *Address*: Baroda.

[B]AJPAI, GIRJA SHANKAR, B.A. (Oxon.); B.Sc. (Allahabad); C.B.E. (Civil), 1922; C.I.E., 5 July 1926; I.C.S., Deputy Secretary to the Government of India, Department of Education, Health and Lands. *b.* 3 April 1891. *Educ.*: Muir Central College, Allahabad and Merton College, Oxford. Appointed to the I.C.S. in November 1915; Asstt. Magistrate and Collector, United Provinces, 1915-1919; Under-Secretary to Government, United Provinces, 1920-21; Private Secretary to the Rt. Hon. V. S. Srinivasa Sastri and Secretary for India at Imperial Conference, 1921; and at Conference for Limitation of Armaments, Washington, 1921-22; on deputation to the dominions of Canada, Australia, and New Zealand to investigate the status of Indians resident in those territories, 1922; Under-Secretary to the Government of India, Deptt. of Education, Health and Lands, 1923; officiating Deputy Secretary to the Government of India, Department of Education, Health and Lands, 1924; Secretary to the Indian deputation to South Africa, 1925-26; Deputy Secretary to the Government of India, June 1926. *Address:* Pentland, Simla.

BAJPAI, PANDIT SANKATA PRASADA, Rai Bahadur, B.A., Zemindar and Banker. *b.* Nov. 18, 1886. *m.* Shrimati Sumitra Devi. *Educ.*; Canning College, Lucknow; Ewing Christian College, Allahabad and University School of Law, Allahabad. Elected Member Benares Hindu University in 1917; Elected Hon. Secy., Kheri Dist. Board, 1918; Appointed Hon. Magistrate, 1918; Elected Chairman, Lakhimpur Municipality, 1919, and Member of the Imperial Legislative Assembly, 1920. *Address*: Lakhimpore, Kheri (Oudh).

BAKER, JOHN ALFRED, C.I.E., Chief Engineer, P.W.D., Central Provinces. *b.* 14 May 1882. *m.* Dorothy Austice Prideaux. *Educ.*: Royal Indian Engineering College, Cooper's Hill. Government Service since 1904. *Address*: Nagpur, C.P.

BALKRISHNA, DR., M.A., Ph.D., F.S.S. F.R.E.S., Principal and Prof. of Economics, Rajaram College and Inspector of Secondary Education, Kolhapur, *b.* 22nd December 1882. *m.* Miss Dayabai Malsey, B. P. N. A. *Educ:* Govt. High School, Multan, D. A. V. College and Government College, Lahore; School of Economics and Politics, London. Was Principal and Governor of Gurukula University, Hardwar, for one year; Vice-Principal for six years and Professor of History and Economics for 11 years. Became Principal, Rajaram College, 1922. Director of Economic Bureau; President, Kolhapur Scout Association; Director, Rent-Assessment Bureau; Chairman, Secondary Teachers Association; President, Technical School; Col. Wodehouse Orphanage, A.V. Free School; Member, State Panchayat and Kolhapur Municipality. *Publications.*: (In English) Commercial Relations between India and England (1924); The Industrial Decline in India; Demands of Democracy (1925); (In Hindi) Seven books on History, Economics, Politics and Religion; History of India (in Marathi). *Address:* Shahupuri, Kolhapur.

BALRAMPUR, MAHARAJA PATESHWARI PRASAD SINGH SAHEB, minor under guardianship of the Court of Wards, United Provinces. *b.* 2 Jan. 1914. *Address:* Balrampur.

BANATVALA, COL. SIR HORMASJEE EDULJEE Kt. (1920); C.S.I., 1917; I.M.S. (retd.). *b.* 20 Oct. 1859. First Commission, 1884; military duty until 1893; served Burma 1886-89; Medal with 2 clasps, Lushai Expedition, 1891-92; Inspector-General of Civil Hospitals and Prisons, Assam, 1914-19. *Address:* Mount Villas, Bandra, Bombay.

BANERJEE, MAHENDRANATH, C.I.E. (1921). B.A. (Cal.), M.R.C.S. (England), L.S.A. (London), Princ., Carmichael Medical Coll., Calcutta, since 1916. *b.* Sept. 1856. *Educ.:* Presy. Coll. St. Xavier's Coll., and Medical Coll., Calcutta, Edinburgh Univ., and King's Coll., London. Resident Medical Officer, R. Free Hospital, London, 1883-85; Lecturer of Medicine, Calcutta Med. Sch., 1890-1915; Additional Member, Imp. Leg. Council, 1916; Senior Physician, Albert Victor Hospital, 1900-19; Consulting Physician since 1919. Member of the State Med. Faculty of Bengal; Fellow and Member of Senate of Calcutta Univ.: Member of Sanitary Conference, Simla, 1919; President, Ayurvedic Committee lately appointed by Government of Bengal. *Address:* 32, Theatre Road, Calcutta.

BANERJI, SIR ALBION RAJKUMAR, Kt. (1925), I.C.S., C.S.I. (1921), C.I.E. (1911), Senior and Foreign Minister to H. H. the Maharaja of Jammu and Kashmir, March 1927. *b.* Bristol, 10 Oct. 1871., *m.* 1898. *d.* of Sir Krishna Gupta. *Educ.:* Calcutta University, Balliol College, Oxford; M.A., 1892. Entered I.C.S., 1895; served as district officer in the Madras Presidency; Diwan to H. H. the Maharaja of Cochin, 1907-14; reverted to British service, 1915; Collector and District Magistrate, Cuddapah; services placed at the disposal of Government of India, Foreign Department, for employment as Member of the Executive Council of H.H. the Maharaja of Mysore, March 1916. Officiated as Dewan of Mysore, 1919. Retired from the I.C.S. Diwan of Mysore, 1922-26. Awarded I Class title "Rajamantradhurina" of Gandabherunda Order, with Khillats by H. H. The Maharaja in open Durbar, Oct. 1923. *Address:* Srinagar Club, Srinagar, Kashmir.

BANERJI, SUKUMAR, B.A., Assistant Commissioner of Police in charge of North Suburbs, Calcutta. *b.* 5 October 1880. *m.* to Suhasini, eldest *d.* of late Kumar Satyeswar Ghosal of Bhukailas Raj. *Educ*: St. Xavier's College, Calcutta, Law class, Government College, Krishnagar; Bengal Police Training School; obtained First Prize in Law in the Final Examination of the Police Training School. Joined Calcutta Police in 1902; has been on several occasions especially mentioned in the Annual Administration Reports of the Calcutta Police. *Address*: Police Headquarters, Lal Bazaar, Calcutta.

BAPTISTA, JOSEPH, Bar-at-Law. *b.* 17 March 1864. *Educ.:* St. Mary's School, Bombay; Coll. of Science, Poona; Cambridge University. L.C.E. (Bom.), B.A. and LL.B. (Cantab.): has taken a prominent part in the Indian Home Rule and Labour Movements. President, Bombay Provincial Conference,

1915; President, Indian Home Rule League, 1916-26; Vice-President, Responsive Co-operation Party 1926-27; Indian Home Rule League Delegate to British Labour Party 1927-18; Member, Bombay Legis. Council, 1924-26; and Member, Legis. Assembly, 1926-27; President, All-India Trade Union Congress, 1922-23. Labour Delegate to the Labour Conference, Geneva, 1924. President Bombay Municipal Corporation, 1925. *Publications:* Lectures on Roman Law, Government Law School, Bombay; Commercial Laws of the World (Indian) Section. *Address:* Matharpacady, Bombay.

BARIA, CAPTAIN (HON.) HIS HIGHNESS MAHARWAL SHRI SIR RANGITSINHJI, RAJA OF: K.C.S.I. (1922). *b.* 10 July 1886; two *s.* one *d. Educ.*: Rajkumar College, Rajkot; Imperial Cadet Corps, Dehra Dun, and in England. Served in European War, 1914-15 and in the Afghan War, 1919. Receives a salute of eleven guns. *Address:* Devgad, Baria, *via* Piplod (B. B. & C. I. Ry.)

BARNE, REV. GEORGE DUNSFORD, M.A. (Oxon), C.I.E. (1923), O.B.E. (1919), V.D. (1923); Principal, Lawrence Royal Military School, Sanawar; and Chaplain, Bengal Ecclesiastical Establishment. *b.* May 6, 1879. *m.* Dorothy Kate Akerman. *Educ.*: Clifton College and Oriel Coll., Oxford. Asstt. Master, Summerfields, Oxford, 1902-08; Curate of Christ Church, Simla, 1908-10; Chaplain of Sialkot, 1910; Chaplain of Hyderabad, Sind, 1911; and Asstt. Chaplain of Karachi, 1911-12. *Address:* Sanawar, Simla Hills.

BARODA, H.H. MAHARAJA GAEKWAR SIR SAYAJI RAO III., G.C.S.I. (1881); G.C.I.E. (1919); LL.D. *b.* 10 March 1863. *m.* 1st., 1881, Chimnabai Maharani of the house of Tanjore: 2nd, 1885, Chimnabai Maharani II., C.I.; 3 *s.* 3 *d.* of whom 1 *s.* 1 *d.* Survive. *Educ.* Maharaja's School, Baroda. Succeeded, 1875. Invested with powers, 1881. *Publications*: "Famine Notes" and "From Caesar to Sultan." *Address:* Baroda.

BARRON, CLAUD ALEXANDER, C.S.I (1921), C.I.E. (1911); C.V.O. (1922); F.R.G.S. Revenue Minister, Bahawalpur State. *b.* 22 December 1871. *s.* of Col. W. Barron, B.S.C. *m.* 1912, Ida Mary *e. d.* of Major-General Sir R. H. Ewart, K.C.M.G., C.B. one *s. Educ.:* Grammar School and University, Aberdeen; Clare College, Cambridge. Entered I.C.S., 1890; Chief Secretary, Punjab Government, 1912-16; Chief Commissioner, Delhi, 1918-24. Financial Commissioner, Punjab, since 1924-27. *Address*: Bahawalpur, Punjab.

BARROW, GENERAL SIR GEORGE de SYMONS, K. C.B., *cr.* 1919 K.C.M.G., *cr.* 1918; C.B., 1915, A. D. C. General to the King 1923. G.O.C. Eastern Command (1923). *b.* 25 October 1864. *m.* 1902, Sybilia, *d.* of late Colonel G. Way, C.B. Entered Army, Connaught Rangers, 1884; Indian Staff Corps, 1886; D.A.Q.M.G., India, 1903; D.A.A.G., Staff College, 1908; General Staff Officer, 1914; served Waziristan, 1894-5; China, 1900 (medal with clasp); European War; 1914-18 (despatches C. B., promoted Maj-General), including capture of Jerusalem (K.C. M.G., K.C.B.); Commander Legion of Honour. 1917. Order of the Nile, 1918. Afghan War 1919. G.O.C., Peshawar Dist. until 1922. A. G. in India (1922). *Address:* Eastern Command Headquarters, Naini Tal.

BARTHE, RT. REV. JEAN MARIE; Bishop of Paralais since 1914. *b.* Lesignan, Tarbe. 1849. *Educ.*: St. Pe. Seminary. Bishop of Trichinopoly, 1890-1914. *Address:* Shembaganur, Madras Presidency.

BARTON, SIR WILLIAM PELL, (1927); K.C.I.E. (1914); C.S.I. (1920); I.C.S.; Resident at Hyderabad. *m.* Evelyn Agnes Heniz Smith, *d.* of J. H. T. Herier Smith, Esq., of Slade, Bideford, N. Devon. *Educ.:* Bedford, Worcester College, Oxford: Univ. College, London. Appointed to the I.C.S. in 1894; served in the Punjab and on the Afghan Frontier; Joined the Political Department in 1906. Held among other appointments those of Political Agent, Kurram and Malakand, Deputy Commissioner of Dera Ismail Khan and Kohat, Revenue Commissioner and Judicial Commissioner. Served during the Afgan War of 1919. Transferred to Baroda as Resident in Aug. 1919 and to Mysore as Resident in 1920. Became Resident of Hyderabad in July 1925. *Address:* The Residency, Hyderabad, Deccan.

BARUA, RAI BAHADUR DEVICHARAN, B.A., B.L., M.L.A., Tea Planter. *b.* 1864. *Educ.:* City College, Presidency College and the General Assembly's Institution, Calcutta. Joined the Bar in 1888 and taking to tea plantation and having acquired 3 tea gardens at Jorhat retired from the Bar in 1917; Secretary, Jorhat Sarvajanik Sabha for nearly 17 years since 1890. Elected member of the Indian Legislative Assembly, 1921; Hon. Magistrate, Jorhat Bench. *Address*: Jorhat, Assam.

BATLEY, CLAUDE, A.R.I.B.A., Professor of Architecture, Bombay School of Art, also Member of Messrs. Gregson, Batley and King, Chartered Architects. *b.* Oct. 1879. *Educ.:* at Queen Elizabeth's School, Ipswich. Articled in Ipswich. Practised in Kettering, Northants and in London up to 1913 and in Bombay thereafter. *Publications:* Sundry articles and papers both in England and India on architectural subjects. *Address*: Schoo of Art, or Chartered Bank Building, Bombay.

BEAZLEY, JOHN GODFREY, B.A. (Oxon.); C.I.E. (1928); Secretary to Government, Punjab, Transferred Departments. *b.* 9th February 1885. *m.* Roberta, 3rd *d.* of the late David Mitchell, Esq., J.P., of Polmont, Stirlingshire. *Educ:* Rugby and Trinity College, Oxford, Arrived in Punjab 1908 and served as Asstt. Commissioner and Deputy Commissioner; Colonization Officer, Lower Bari Doab Colony, 1918-20; Additional Dy. Secretary, Government of India, Department of Commerce, 1920-21; Offg. Director of Industries, Punjab, 1922-23; Secretary to Government, Punjab Transferred Departments 1924-28. *Publications:* Municipal, Law and Practice in the Punjab; The Punjab Colony Manual (with F. H. Puckle, I.C.S.) *Address:* 5, Race Course Road, Lahore; and Forest Lodge, Simla.

BEDI RAJA, SIR BABA GURBUKSH SINGH, Kt. *cr.* 1916; K.B.E. (1920), C.I.E., 1911; Hon-Extra Asst. Commissioner in the Punjab. *b.* 1861. A Fellow of the Punjab and Hindu Universities; was a delegate to the Indo-Afghan Peace Conference in 1919. *Address:* Kallar, Punjab.

BELL, ROBERT DUNCAN, C.I.E. (1919), Secretary to Government of Bombay; Development Department. *b.* 8 May 1878. *Educ.:* Heriot's School, Edinburgh, and Edinburgh University. *m.* Jessie, *d.* of D. Spence, Esq. Appointed I.C.S., Bombay, 1902. Secretary, Indian Industrial Commission, 1916-17, Controller, Industrial Intelligence 1917-18, Controller, Oils and Paints, 1918-19 Director of Industries, Bombay, 1919-24 *Address:* C/o Grindlay & Co., Bombay.

BELVALKAR, SHRIPAD KRISHNA, M.A., Ph. D. (Harvard Univ.), I.E.S., Professor of Sanskrit, Deccan College, Poona. *b.* 11 Dec. 1881. *Educ.:* Rajaram College, Kolhapur and Deccan College, Poona and at Harvard, U.S.A. Joined Bombay Educational Department, 1907. Prof., Deccan College since 1914; one of the principal founders of the Bhandarkar Oriental Research Institute and at present its Hon. Secretary. Also Hon. Secretary, Poona Sanskrit College Association. *Publications* History of Systems of Sanskrit Grammar; Edition and translation of Bhavabhuti's Later History of Rama" in the Harvard Oriental Series; English translation of Kavyadarsa; Critical edition of Brahmasutra-bhashya with Notes and translation; Basu Mallik Lectures on Vedanta Philosophy, Calcutta University, 1925; and (in collaboration with Prof. Ranade) History of Indian Philosophy, Vol. 2 (out of the 8 projected); several papers contributed to Oriental Journals or presented to the Oriental Conferences, etc. *Address:* "Bilvakunja," Bhamburda, Poona, No. 4.

BENARES, H. H. SIR PRABHU NARAYAN SINGH, MAHARAJA BAHADUR OF, LT.-COL. LL.D., G.C.I.E. (1898), G.C.S.I. (1921); *b.* 26 November 1855. *S.* uncle 1889. *Address:* Fort, Ramnagar, Benares State.

BENJAMIN, VEN. T. KURUVILLA, B.A., Archdeacon of Kottayam since July 1922. Formerly Incumbent of Pro-Cathedral, Kottayam. 1895-1922; Acting Principal, C.N.I., Kottayam, 1912-13, Surrogate, 1922, Bishop'-Commissary, 1923. *Publications:* (in Malayalam) Notes on the Epistles to the Hebrews; Notes on the Epistles to the Thessalonians: Devotional Study of the Bible. Editor of Treasury of Knowledge Family Friend *Address:* Kottayam.

BENNETT, GEORGE ERNEST, M.Sc., M. Inst-C.E., M.I.M.E., Deputy Chief Engineer, Bombay Port Trust. *b.* 1884. *m.* Frances Sophia Bennett. *Educ.:* Stockport Grammar School, Manchester University. Assistant Engineer (Bridges), G.I.P., 1910-1916: Port Engineer, Chittagong, 1916-1919; Ex-Engineer, Calcutta Port Trust, 1919-24: Senior Executive Engineer, Calcutta Port Trust, 1924-26; Deputy Chief Engineer, Bombay Port Trust, 1926. *Address:* Bombay Port Trust, Bombay.

BENZIGER, RT. REV. ALOYSIUS MARY, O.C.D., Bishop of Quilon since 1905; *b.* Einsoedeln, Switzerland, 1864. *Educ.:* Frankfort; Brussels; Downside. Came to India, 1890, Bishop of Tabæ, 1900; Assistant to the Pont. Throne, Roman Court, 1925. *Address:* Bishop's House, Quilon, Travancore.

BERKELEY-HILL, Lt.-Col. OWEN ALFRED ROWLAND, M.A., M.D., Ch. B. (Oxon.), M.R. C.S., (Eng.), L.R.C.P. (Lon.) I.M.S., Medical Superintendent, European Mental Hospital, Ranchi. *b.* 22 Dec. 1879. *m.* Kunhimanny *d.* of Nellary Ramotti. *Educ.* at Rugby School, Universities of Oxford and Gottingen and University College Hospital, London. Entered Indian Medical Service in 1907. Served throughout Great War (East Africa Campaign); Mentioned in Despatches. *Publications:* Numerous articles in scientific journals. *Address:* Kanke (P.O.), Ranchi, Bihar and Orissa.

BERTHOUD, EDWARD HENRY, B.A. (Oxon), 1898; Member, Council of State and Commissioner of Excise and Inspector-General of Registration, Bihar and Orissa. *b.* 13 Sept. 1876. *m.* Phyllis Hamilton Cox. *Educ.* at Uppingham and New College, Oxford. Asstt. Magte., Joint Magte. and Magte. and Collector in Bengal and Bihar and Orissa since 1900. *Address:* Patna.

BESANT, ANNIE; President, Theosophical Society and of National Home Rule League, author and lecturer on religious, philosophical, political, and scientific subjects; *b.* 1 October 1847; *d.* of William Page Wood and Emily, *d.* of James Morris; *m.* 1867, Rev. Frank Besant (*d.* 1917), Vicar of Sibsey, Lincolnshire; legally separated from him, 1873; one *s.* one *d.* *Educ.:* privately in England, Germany, France; Joined the National Secular Society, 1874; worked in the Free Thought and Radical Movements led by Charles Bradlaugh, M.P.; was co-editor with him of the National Reformer, Member of the Fabian Society, Member of the London School Board, 1887-90; Joined the Theosophical Society in 1889: became a pupil of Mme. Blavatsky; elected its President in 1907, 19.4, 1921 and 1928. Founded 1898 the Central Hindu College at Benares; 1904, the Central Hindu Girls' School, Benares; is on Court Council and Senate of Benares Hindu University and on Council and Senate of the National Univ., given Hon. D.L., Benares Hindu Univ., 1921 in recognition of unique services; Elected President of the Indian National Congress, 1917-18: Secretary of All-Parties; Conference (Auxiliary, Madras); Editor of *The Theosophist*, monthly; *The Adyar Bulletin*, monthly, and Editor of *New India*, daily and weekly. *Address:* Adyar, Madras.

BHABHA, HORMASJI JEHANGIR, M.A., J.P., C.I.E., Hon. Pres. Magte., Director of Tata Hydro-Electric Power Supply Co.; Member of Council of the Indian Institute of Science, Bangalore, Member of Committee of David Sassoon Reformatory Institution, Fellow of the Bombay and Mysore Universities. Deputed as a delegate to the Congress of Imperial Universities 1926 by the Universities of Bombay and Mysore. *b.* 27 June 1852.

m. Miss Jerbai Edaljee Batiwala. *Educ:* Elphinstone College and in England. Asstt. Professor, Elphinstone College, 1874-76; Vice-Principal and Professor of Logic and Ethics, Central College, Bangalore. 1876. Principal Maharaja's College, Mysore, 1884; Education Secretary to Government, Mysore, 1890; Inspector-General of Education in Mysore, 1895-1909; Munir-ul-Talim (Mysore) 1909. *Pub.:* Special Report on Manual Training in Schools of General Education; Report on the Education of Parsi Boys, 1920, a Visit to Australian Universities 1923, a Visit to British Universities 1926; Modern Cremation and Parsees, 1922. *Address:* 39, Pedder Road, Bombay.

BHAIRUN SINGHJI BAHADUR, COLONEL MAHARAJ SRI SIR, K.C.S.I., Vice-President of Council of Bikaner State. *b.* 16th September 1879. *Educ.* Mayo College Ajmer, Appointed Companion to H.H. the Maharaja, 1895 and accompanied His Highness in his Indian Tour in 1896. Appointed Member of State Council, 1898 and was from time to time Personal Secretary to His Highness. Senior Member of Council and Secretary for Foreign and Political Department, Mahkma Khas; Foreign Member of Council, Political Member; Vice-President of State Council and the last Cabinet. Is Col. of the Sadul Light Infantry and Personal A. D. C. to the Maharaja. *Publications*: Bhairavbilas and Rasikbinod. *Address:* Bikaner.

BHANDARI, SIR GOPAL DAS, KT., RAI BAHADUR (1907); Kaiser-i-Hind Gold Medal (1915); M.B.E. (1919); C.I.E. (1921); M.L.C. (1924): Advocate, High Court; *b.* Jun., 1859. *Educ:* Government College, Lahore; Elected Member, Amritsar Municipal Committee, 1889-1902. Nominated member, 1902, to the present date. Chairman, Finance Committee for 30 years. First non-official President, Municipal Com., elected March 1921; elected second time June 1922. Member, Sanitary Board, Punjab, 11 years; Member, All-India Sanitary Conferences, Punjab, Madras, and Lucknow. Special Commr. twice; Lahore Conspiracy cases, 1916-17. Member, Imperial Police Selection Board, October 1922. President, Hindu Sabha, Amritsar; His Majesty's Guest, Delhi Durbar, 1911; Member, Executive Committee, D.A.V. College, Lahore: Chairman, Board of Directors, Punjab National Bank; Member and Punjab representative, Imperial Malaria Conference, September 1908. President, Managing Council, Hindu College, Amritsar; Provincial Darbari, 1912-13; elected for the third time President, Municipal Committee, Amritsar, May 1925. *Publications:* Malaria Booklet, 1908; Town-planning; Milk; Sanitary Conditions in boys' and girls' schools in India, etc. *Address:* President, Municipal Committee, Amritsar.

BHARATPUR, MAHARAJA OF, Lt.-Col. H.H. SRI MAHARAJA BRIJENDRA SAWAI SIR KISHEN SINGH BAHADUR, BAHADUR JUNG, K.C.S.I., *b.* 4 October 1899, *s.* of Maharaja Ram Singh; *m.* sister of H. H the Raja of Faridkot. *Educ.:* Mayo College, Ajmer and Wellington *Address:* Bharatpur, Rajputana.

BHARGAVA, RAI BAHADUR, PANDIT JAWAHAR LAL, B.A., LL.B., Advocate, High Court, Lahore. *b.* 1st Oct. 1870. *m. d.* of L. Madan Lal, Bhargava of Rewari. *Educ.* Sirsa M.B. School, Rewari M. B. School, Lahore Mission Coll., Lahore. Government Coll. and Law School, President, Bar Assocn., Hissar; got Durbar Medal and War Loan Sanad; acted as Secretary, India War Relief Fund, The Aeroplane Fleet Fund, King Edward Memorial Fund; was elected member, Punjab Legislative Council, 1916-20; and Legislative Assembly. 1921-23. Life member, St. John Ambulance Association and Chairman, District Centre at Hissar. *Address:* Hissar (Punjab).

BHATE, GOVIND CHIMNAJI, M.A. (Bom.), *b.* 19 Sept. 1870. Widower. *Educ:* Deccan College. Professor in Fergusson College, Poona, from 1895. *Publications:* Principles of Economics, Distant Travels, Lectures on Sociology, Carlyle, Three Philosophers, Philosophy of the Fine Arts. (All in Marathi.) Speeches and Essays (in English); Kant and Shankaracharya (in Marathi). *Address:* Mahad, District, Kolaba.

BHAVNAGAR, H. H. MAHARAJA KRISHNA KUMAR SINHJI, MAHARAJA OF; *b.* 19th May 1912, *s.* father Lt.-Col. H. H. Maharaja Sir Bhavsinhji Takhtasinhji, K.C.S.I., July 1919. *Educ.:* Harrow, England. *Address:* Bhavnagar, Kathiawar.

BHOPAL, H. H. NAWAB SULTAN JAHAN BEGAM, Ruler-mother of, G.C.S.I. (1910); G.C.I.E., (1904); G.B.E. (1918); C.I. (1911). *b.* 9th July, 1858. Was a Ruling Princess of India and Nawab Begam of Bhopal, 1901-26; (abdicated in favour of her son); *m.* 1874, Ahmad Ali Khan, a member of a distinguished Afghan family of Jalalabad, and has a issue—a son, Lieut.-Col. Sikander Saulat Ifti-kharul-Mulk Mohammad Hamidullah Khan, C.S.I., C.V.O., (now H.H. the Nawab of Bhopal). *Address:* Bhopal, Central India.

BHOPAL, H. H. SIKANDER SAULAT NAWAB IFTIKHARUL-MULK MOHAMMAD HAMIDULLAH KHAN, NAWAB of, C.S.I. (1921); C.V.O. (1922). *b.* 9th Dec., 1894; is the Ruler of the second most important Mohammadan State of India. *m.* 1905 Her Highness Maimoona Sultan Shah Banoo Begam Sahiba; succeeded in 1926 mother, Her Highness Nawab Sultan Jahan Begam. G.C.S.I., G.C.I.E., C.I., G.B.E. Has three daughters the eldest of whom Nawab Gouhar-e-Taj-Abida Sultan Begam is the heiress-presumptive. *Address:* Bhopal, Central India.

BHORE, JOSEPH WILLIAM, C.B.E. (1920), C.I.E. (1923), I.C.S., Secretary to Govt. of India, Dept. of Education, Health and Land Records (on deputation with the Statutory Commission on Indian Reforms, 1928) *b.* 6th April 1878. *m.* to Margaret Wilkie Stott, M.B., Ch. B. (St. Andrews), M.B.E. *Educ.:* Deccan College Poona and University College, London. Under Secretary, Government of Madras, 1910; Dewan of Cochin State, 1914-1919; Dy. Director of Civil Supplies, 1919; Secretary to the High Commsr. for India, London, 1920; Ag. High Commsr. for India in the United Kingdom, 1922-1923 Secretary to

Government of India, Department of Education, Health and Lands, 1924; and Ag. Member, Viceroy's Executive Council, November. 1926 July 1927. *Address* : 6, Hastings Road, New Delhi, and C/o The National Bank of India, Madras.

BIKANER, MAHARAJAH OF, MAJOR-GENERAL H. H. MAHARAJADHIRAJ RAJ RAJESHWAR NARENDRA SHIROMANI MAHARAJAH SRI SIR GANGA SINGHJI BAHADUR, G.C.S.I., *cr.* 1911 ; G.C.I.E., *cr.* 1907 ; K.C.S.I., *cr.* 1904 ; K.C.I.E., *cr.* 1901 ; G.C.V.O., *cr.* 1919, G.B.E., (Military Division), 1921 ; K.C.B., *cr.* 1918 ; A.-D.-C. ; Grand Cordon of the Order of the Nile, *cr.* 1918 ; Hon. LL.D., Cambridge and Edinburgh ; Donat of the Order of St. John of Jerusalem in England ; son of Maharaj Sri Lall Singhji Bahadur and adopted son of his own elder brother His late Highness Maharajah Sri Dungar Singhji Bahadur ; born 3 October 1880 ; educated at the Mayo College, Ajmer, *m.* 1897 ; is one of the Ruling Princes of India (succeeded 31st August 1887. and is entitled to a salute of 19 guns. Two sons, one daughter, one grandson, one grand-daughter. Invested with full ruling powers, 1898, granted Hon. Commission of Major in the British Army, 1900, and attached to 2nd Bengal Lancers ; promoted Lt.-Col., 1909; Col., 1910; Major-General, 1917; served with British Army in China in command of Bikaner Camel Corps, 1901, (medal, despatches, K.C.I.E.); served European War, 1914-15 in France and in Egypt (despatches France and Egypt, K.C.B.), Major-General, 1914; Bronze Star Grand Cordon of the Order of the Nile G.B.E. (Military Division). Awarded gold medal (1st Class) of Kaiser-i-Hind for public service in India during Great Famine of 1899-1900 ; attended the Coronation of King Edward VII, 1902, and of King George V, 1911 ; Hon. A.-D.-C. to H. R. H. the Prince of Wales, 1902 ; A.-D.-C. to H. I. M. the King Emperor since 1910. Was selected as one of the three Representatives of India at the Imperial War Cabinet and Conference, 1917. Received the Freedom of the Cities of London, Edinburgh, Manchester and Bristol. Was selected again as one of the two Representatives of India at the Imperial War Cabinet and the Peace Conference, 1919. Elected Chancellor of the Chamber of Princes, 1921, and re-elected in 1922 and continued as such in 1923 and 1924. Represented the Ruling Princes of India for the third time at the Assembly of the League of Nations, 1924. Is a Patron of the Benares Hindu University and Sri Bharat Dharm Mahamandal, Benares, a Vice-President of the East India Association, London ; the Royal Colonial Institute, London ; the Indian Gymkhana Club, London ; the Indian Army Temperance Association, Simla ; a member of the General Council of the Mayo College, Ajmer, and of the Managing Committee, Mayo College ; General Council, Daly Coll., Indore ; the first Member of the Indian Red Cross Society ; the Benares Hindu University Court. Is a Freemason, Past Master of Lodge "Rajputana," Abu ; a past Dy. Dist. Grand Master of the Dist. Grand Lodge, Bombay ; Founder and Scribe E of the Royal Arch Chapter "Sir Ganga Singh," Abu ; holds the rank of the Past District Grand Scribe Nehemiah in the Dist. Grand Chapter of Bombay ; Mem. of Royal Arch Chapter, Ajmer and the Phulkian Lodge, Patiala. *Heir-Apparent:* Captain Maharaj Kumar Sri Sadul Singhji Bahadur, C.V.O., *b.* 7 September 1902, second son Maharaj Sri Bijey Singhji Bahadur, *b.* 29 March 1909. Grandson Bhanwarji Sri Karni Singhji Bahadur, *b.* 21 April 1924. *Address:* Bikaner, Rajputana.

BILIMORIA, ARDASHIR JAMSETJEE, B.A., *b.* 18 September 1864. *Educ.:* Chandanwady High School and Elphinstone College, Bombay. Joined Messrs. Tata, in 1884. Retired 1921. *Address:* 5, New Queen's Road, Bombay.

BILLIMORIA, SIR SHAPOORJEE BOMONJEE, KT. (1928), M.B.E., J.P., Partner in the firm of S. B. Billimoria & Co., Accountants and Auditors. *b.* 27 July 1877. *m.* Jerbai, *d.* of Bhicaji N. Dalal (1906). *Educ.* St. Xavier's College. Honorary Presidency Magistrate Member, Auditors' Council, Bombay, Member of the City of Bombay Improvement Trust Committee, Vice-President, Indian Merchants' Chamber 1926-27 ; President, Indian Merchants' Chamber, 1927-28 ; Member, Government of India Back Bay Inquiry Committee, 1926-27. *Residence*: 13, Cuffe Parade, Colaba, Bombay.

BINNING, SIR ARTHUR WILLIAM, KT. (1916) Merchant in Rangoon. *b.* 5 August 1861 *s.* of Robert Binning, Glasgow ; unmarried *Educ:* Glasgow Academy. *Address:* Rangoon.

BINNING, DOUGLAS BLYTH, M.A., LL.B., Barrister. *b.* 29 Nov. 1869. *m.* Miss Berne. *Educ.:* Glasgow Academy, Glasgow and Cambridge Universities. Practised in the Bombay High Court for 32 years. *Publications*: "The Little Hill Station" and numerous articles. *Address:* High Court, Bombay.

BIRDWOOD, FIELD-MARSHAL SIR WILLIAM RIDDELL, G.C.B., 1923; 1st Bt., *cr.* 1919; G.C.M.G., *cr.* 1919; K.C.B., *cr.* 1917; K.C.S.I., *cr.* 1915; K.C.M.G., *cr.* 1914 ; C.B., 1911 ; A.D.C. General ; C.I.E., 1908 ; D.S.O., 1908 ; Commander-in-Chief, India, 1925 ; Member of the Executive Council of the Governor-General ; and Member of the Council of State, 1925. *b.* 13 Sept. 1865 ; *e.* surv. *s.* of late H. M. Birdwood, C.S.I., J.P., M.A., LL.D. (Cantab.), late Judge of High Court and Member of Council, Bombay; I.C.S.; *m.* 1894, Jeannette Hope Gonville, *e.d.* of Col. Sir B. P. Bromhead, C. B., 4th Bart., of Thurlby Hall, Lincoln. *Educ.:* Clifton College ; R.M.C. Sandhurst. Lieut., 4th Batt. Royal Scots Fusiliers, 1883 ; 12th Lancers, 1885 ; 11th Bengal Lancers, 1886 ; Gen., 1917 ; Field-Marshal, 1925 ; Adjutant, Viceroy's Body-guard, 1893 ; Brig. Major, S. Africa, 1899 ; D.A.A.G., S. Africa, 1900 ; Military Secretary to Com.-in-Chief, S. Africa (Lord Kitchener), 1902 ; A.M.S. and Persian Interpreter to Com.-in-Chief, India, 1902 ; A.A.G. Headquarters, India, 1904 ; Military Secretary to Com.-in-Chief, India, 1905 ; Brigade Commander, 1909 ; Quarter-Master-General in India, 1912 ; Secry. to Govt. of India, Army Deptt. and Member of Governor-General's Legislative Council, 1912-14;

G.O.C. Australian Imperial Force, 1915-20; A.D.C. to the King, 1906-11; A.D.C. General to the King, 1917-22; served Hazara, 1891 (medal with clasp); Isazai, 1892; N.-W. Frontier, India, 1897-98 (medal, two clasps); Tirah, 1897-98 (despatches, clasp); S. Africa, 1899-1902 (severely wounded), despatches 5 times, brevets of Major and Lieut.-Col., Queen's Medal, 6 clasps, King's medal, two clasps; Chief Staff Officer, Mohmand Expedition, 1908 (despatches, medal and clasp, D. S. O.); served in-command of detached landing of Australian and New Zealand Army Corps above Gaba Tepe, European War, 1914-18 (wounded, despatches, Commander-in-Chief, Mediterranean Expeditionary Force and Commander, Dardanelles Army, 1915-16; Commandant, Australian and New Zealand Army Corps and Australian Forces, France, commanded, 5th Army, 1916-18; Rising Sun of Japan; Tower and Sword of Portugal Grand Officer of the Legion of Honour, Croix de Guerre: Grand Officer of the Crown, Belgium; Croix de Guerre, Belgium); Colonel, 12th Lancers, 1920; Colonel Probyn's Horse, 1924; France, 1918-19; Colonel 6th Gurkhas, 1926; Colonel-in-Chief, 1st New Zealand Mounted Rifles (Canterbury Yeomanry Cavalry) 1926; Field Marshal Commonwealth of Australia Military Forces, 1926; LL.D., Cambridge, 1919; LL.D., Melbourne (Victoria) and Sydney (N.S.W.), 1920; Fellow, Royal Colonial Institute, Acting Commander-in-Chief, India, 1924; General Officer Commanding-in-Chief, Northern Command November 1920-24. *Heir*: Captain Christopher Bromhead, Birdwood. 5th Probyn's Horse. *Address:* Simla.

BISWAS, CHARU CHANDRA, *y.s.* of late Asutosh Biswas, Public Prosecutor, 24 Parganas, M.A., B.L., Advocate, Calcutta High Court. *b.* April 21, 1888. *m.* Sm. Suhashini Biswas, *d.* of Mr. S. C. Mallik. *Educ.:* Hindu School;, Presidency College, Ripon Law College. Enrolled Vakil, High Court, April 18, 1910: Advocate, November, 1924; Ordinary Fellow Calcutta University, and Member of the Syndicate, 1917-22, again from 1926: member of Dacca Board of Secondary Education, 1921-22: Professor, University Law College 1913-21 and 1928-29. Commissioner, Calcutta Corporation, 1921-24, and again Councillor Calcutta Corporation since 1925; Member Calcutta Improvement Trust, since 1926; Secy., Bhowanipore Ratepayers' Association, Founder Secy., South Suburban College, 1916-21; Secy., South Suburban School; Main and Branch, and Sir Romesh Mitter Girls' School: Member of Committee of Indian Association: was member of Council and for a short time Secretary, National Liberal League, Bengal. Unsuccessfully contested in Liberal interests once for Indian Legislative Assembly (1920), and twice for Bengal Legis. Council. (1924 and 1926), from Calcutta constituencies, *Address:* 58, Puddopukur Road, Bhowanipore. Calcutta.

BLAIR, ANDREW JAMES FRASER, Asst. Editor, "*The Statesman,*" Calcutta; Founded the Eastern Bureau, Limited, Calcutta, 1912; late Editor and Managing Director, The Empire, Commerce, The Empire Gazette. (daily and weekly newspapers published in Calcutta); *b.* Dingwall, Ross-shire, 30 September, 1872; *y.s.* of late Andrew Blair, Rector, Dingwall Burgh School, and Mary Ann Campbell, *d.* of late Thomas Duff, Glasgow; *m.* 1900, Constance, *e. d.* of Thomas Ibbotson; one *s.* one *d. Educ.:* Glasgow High School. Engaged in journalism, since 1890; *Address:* Bengal Club, Calcutta.

BLATTER, THE REV. ETHELBERT, S.J. Ph.D. *b.* 15 Dec. 1877. *Educ.* in Switzerland, Austria, Holland, France. England. Joined the Society of Jesus in 1896; Professor of Botany, St. Xavier's College. Bombay, since 1903; Principal of the same College from 1919-1924; Fellow and Syndic. of the Bombay University since 1919. *Publications*: Bibliography of Indian Botany; The Ferns of Bombay; Natural Orders in Botany; The Palms of British India and Ceylon; The Flora of Aden; The Flora of the Indian Desert; Flora Arabica; Flowering Season and Climate; Contributions to the Flora of Baluchistan, Bionomie der Palmender Alten Welt; Revision of the Bombay Flora; Flora of the Indus Delta; Beautiful Flowers of Kashmir; numerous botanical papers in English and German Scientific Journals. *Address*: Panchgani.

BLENKINSOP, EDWARD ROBERT KAYE, C.I.E. (1911); Settlement Commissioner, Jaipur, 1923. *b.* 15 May 1871; *s.* of Col. Blenkinsop; *m.* Florence Edith, *d.* of late Sir Stanley Ismay, K.C.S.I., three *s. Educ.*, St. Paul's School; Christ's College: Cambridge: Entered I.C.S., 1890; Settlement Office, 1897; Deputy Commissioner, 1902; Kaiser-i-Hind Medal, 1903; Commissioner of Excise, 1906; Chief Secretary to Chief Commissioner, 1912-13. Commissioner, 1916. *Address:* Jaipur, Rajputana.

BLUNT, LESLIE, Solicitor. *b.* 29 Dec. 1876. *m* Kathleen, 2nd *d.* of the late Dr. Thornton of Margate. *Educ.:* Rugby. Senior partner in Craigie Blunt and Caroe. *Address:* 50, Pedder Road, Bombay.

BOAG, GEORGE TOWNSEND, M. A. (Cambridge), C.I.E. (1928), I.C.S. Additional Secretary to the Government of Madras. *b.* November 12, 1884. *Educ.:* Westminster (1897 to 1903) and Trinity College, Cambridge, (1903 to 1907). Passed into the I.C.S. in 1907 and joined the Service in Madras in 1908. *Address:* Madras Club, Madras.

BOILEAU, COLONEL COMMANDANT GUY HAMILTON, C.B. (1919), C.M.G.(1917); D.S.O., (1915), Chief Engineer, Western Command. *b.* 27 Sep. 1870, *m.* Violet Mary (Fergusson). *Educ.* Christ's Hospital, R.M.A., Woolwich. Active Service W. Africa, 1892; Chitral Relief, 1895; China, 1899; Great War France, 1914-19; Afghan War 1919. *Address*: Quetta.

BOLTON, SIR HORATIO NORMAN, B.A., K.C.I.E., (1926); C.S.I. (1918) C.I.E. (1916); Chief Commissioner, N. W. F. Province. *b.* 1 Feb. 1875. *m.* Ethel Frances, *d.* of the late Captain James Charles Henry Mansfield of Castle Wray Co., Donegal. *Educ:* at Rossall and Corpus Christi College, Oxford. Appointed to I.C S., 1897; Assistant Commr., Punjab and N. W. F. P. from 1898; Dy. Commr.,

Dera Ismail Khan 1904; Dy. Commissioner, Peshwar 1912-1919; Rev. Commr. N. W. F. P. 1920; Chief Commr. N. W. F. P. 1923. *Address*: Government House, Peshawar.

BOSE, SIR BIPIN KRISHNA, K.C.I.E. (1920). Kt. *cr.* 1907; C.I.E., 1898; M.A.; Advocate in the Central Provinces and Vice-Chancellor of the Nagpur University. Vice-Chancellor, Nagpur University. *b.* 1851. *Address*: Nagpur, C. P.

BOSE, SIR JAGADIS CHANDRA, Kt. *cr.* 1917; C.I.E., 1903; C.S.I., 1911; M.A. (Cantab.), D. Sc. (Lond.); LL.D., F.R.S., Professor Emeritus of the Presidency College, Calcutta; Founder Director of Bose Research Institute; *b.* 30 Nov. 1858; *Educ.:* Calcutta; Christ's College, Cambridge; Delegate to International Scientific Congress, Paris, 1900; scientific member of deputation to Europe and America, 1907, 1914 and 1919. Published series of papers on Electric waves and other electric phenomena. (Proc. Roy. Society.) Member, Committee of Intellectual Co-operation, League of Nations. *Publications:* Response in the Living and Non-living; Plant Response, Electro-physiology of Plants, Irritability of Plants; Life Movements of Plants, Vols I and II; Life Movements in Plants, Vols III and IV; The Ascent of Sap; The Physiology of Photosynthesis. *Address:* Bose Institute, Calcutta.

BOSE, SIR KAILAS CHUNDER, RAI BAHADUR, KT. *cr.* 1916, C.I.E., 1910; Kaiser-i-Hind. 1909; O.B.E. *b.* Decr. 26, 1850. *Educ.* Calcutta Training Academy, Calcutta University and Medical College. Fellow, Calcutta University; Vice-President, Indian Medical Congress; Fellow, R. Institute of Public Health; Member, British Medical Association; ex-Member of the Corporation of Calcutta and Hon. Presidency Magistrate; connected with many literary and scientific societies of India and England and most of his contributions to the Medical Journals have been reproduced in the English and American Press. 2nd *s.* of late Babu Madhusan Basu. *Address*: 1, Sukea Street, Calcutta.

BRADFIELD, ERNEST WILLIAM CHARLES, Lieut.-Colonel., M.B., M.S., F.R.C.S., O.B.E. (1918); C.I.E. (1928). *b.* May 28, 1880. *m.* Margaret Annie Barnard. *Educ*: King Edward's School, Birmingham; St. Mary's Hospital and St. Bartholomew's Hospital, London. *Address*: Madras.

BRADLEY-BIRT, FRANCIS BRADLEY, B.A. (Oxon.), I.C.S., Collector of Calcutta; and Member, Legislative Assembly. *b.* 25 June 1874. *m.* to Lady Norah Spencer Churchill, *d.* of 8th Duke of Marlborough. *Educ.:* Brasenose Coll., Oxford. Entered I.C.S. 1898; Inner Temple, 1895; Magte. and Collr., Hooghly, Midnapore, Khulna and Calcutta, Asst. Director, Local Resources, Mesopotamia with rank of Lt.-Col., 1918; attached to British Legation, Teheran, 1918-19; mentioned in Despatches, 1919. *Publications:* "Chota Nagpore", "The Story of an Indian Upland," "The Romance of an Eastern Capital" "Sylhet Thackeray," "Through Persia," "Twelve Men of Bengal," "Bengal Fairy Tales". *Address:* United Service Club, Calcutta.

BRAY, SIR DENYS DE SAUMAREZ, C.S.I. (1922); C.B.E., 1919; C.I.E., 1917; K.C.I.E. (1925); I.C.S.; B.A.; Gold Kaiser-i-Hind Medal, 1912; Foreign Secretary (1920), *b.* 28 Nov. 1875, *m.* Celestina, *d.* of Lt.-Col. H. P. P. Leigh, C.I.E. *Educ.:* Real Gymnasium, Stuttgart, Blundell's School, Tiverton, Balliol College, Taylorian, Scholar, Oxford, 1898. Entered I.C.S., 1898; served in the Punjab, N.-W. F.-Province, Baluchistan, and with the Govt. of India; Census Superintendent, Baluchistan, 1910; Dy. Secy., Foreign and Political Dept., 1916; offg. Private Secretary to the Viceroy 1918. Joint Foreign Secy., 1919. *Publications*: The Original Order of Shakespeare's Sonnets, Brahui Language, Life History of a Brahui. *Address:* The Secretariat, Simla or Delhi.

BRAY, SIR EDWARD HUGH, Kt., *cr.* 1917; Senior Partner, Gillanders, Arbuthnot & Co.; President, Bengal Chamber of Commerce; Member of Imperial Legislative Council: Controller of Contracts, Army Headquarters. *b.* 15 Apr. 1874; *m.* 1912, Constance, *d.* of Sir John Graham, 1st Bt. *Educ.:* Charterhouse; Trinity College, Cambridge. *Address*: Gillander House, Calcutta.

BRAYNE, ALBERT FREDERIC LUCAS, M.A (Glas.), B.A. (Oxon.), C.I.E. 1923, Indian Civil Service, Financial Adviser, Military Finance. *b.* 1 April 1884, *m.* 1909 Mary, *e. d.* of James Thomson, M.D. Irvine, Ayrshire. *Educ.*: Irvine, Royal Academy, Glasgow University, Oxford (Trinity College). Appointed I.C.S., Bombay, 1908; Assistant Collector, Satara, 1908-1913; Superintendent, Land Records, 1913-1916; Under Secretary and Deputy Secretary to Bombay Government, Revenue and Financial Departments 1916-20. Subsequently Deputy Secretary, Finance Department, Government of India and in 1922-23 attached to the Inchcape Committee on Retrenchment. Financial Adviser, Posts and Telegraphs, 1923-24, Offg. Secretary, Finance Department 1926-27. *Address:* Finance Department, Government of India.

BRAYSHAY, MAURICE WILLIAM, M.Sc. (Leeds). A.B. Inst. C.E., Member, Railway Board. *b.* 7 March 1883. *Educ.:* Ripon Grammar School, 1895-1900, and Leeds University, 1900-1903. Training in Royal Dockyard Chatham, 1903-5; Apptd. Asstt. Engineer, Indian P.W.D. (Railways) 1905; Asst. Engineer, Eastern Bengal Railway, 1905-09; Assistant and Executive Engineer under Sir Robert Gales on the construction of the Sara Bridge over the Ganges 1909-15; Assistant Agent, North-Western Railway, 1915-17; Dy. Controller, Indian Munitions Board, 1917-18; Assistant. Secretary and Railway Director, Railway Board 1918-24; Dy. Agent B. B. & C. I. Railway, 1924. *Address:* Delhi & Simla.

BROWN, THE REV. ARTHUR ERNEST, M.A. (Cantab.), B.Sc. (London), C.I.E. (1926). Missionary (Wesleyan Methodist). *b.* 17 May 1882. *m.* E. Gertrude Parsons, M.A. *d.* of T. L. Parsons, Esq., Four Oaks, Warwickshire in 1908. *Educ.:* Stationer's Company's School, London; Kingswood School, Bath 1895-1901), Trinity Hall, Cambridge

(Scholar). Entered Wesleyan Methodist Ministry and joined Wesleyan College, Bankura in January 1905; became Principal in 1917; Nominated Fellow of Calcutta University, 1921; General Superintendent, Wesleyan Mission in Bengal. *Publication*; Translation from Bengali of "The Cage of Gold" by Sita Devi. *Address:* Wesleyan College, Bankura, B. N. Ry.

BUCK, EDWARD JOHN, O.B.E. (1918); C.B.E. (1918); Reuter's Agent with Government of India and Member, Associated Press of India; late Vice-Chairman, Alliance Bank of Simla; Director, Associated Hotels of India, Pelman Institute (India), and Boroogh Timber Co. *b.* 1862; *m.* Annie Margaret, *d.* of late General Sir R. M. Jennings, K.C.B. *Educ*: St. John's College, Hurstpierpoint. Was in business in Australia. Assistant and Joint Secretary, Countess of Dufferin's Fund for 28 years. Hon. Sec., Executive Committee "Our Day" in India, 1917-18. *Publication*: "Simla, Past and Present." (two Editions) *Address:* Northbank, Simla.

BUCKLAND, SIR PHILLIP LINDSAY, Kt., *cr*, 1926: The Hon. Mr. Justice Buckland, Judge High Court, Calcutta, since 1919. *Educ.*: Eton and New College, Oxford. *m.* Mary, *d.* of Livingstone Barday. Called to the Bar Inner Temple, 1896. Practised in High Court, Calcutta, *Publication*: Text Book on the Indian Companies Act, 1913. *Address:* Bengal Club, Calcutta.

BUNBURY, EVELYN JAMES, B.A. (Oxon.); M.C., J.P., Hon. Presidency Magistrate. General Manager, Messrs. Forbes, Forbes, Campbell & Co., Ltd., Bombay. *b.* 31 Oct 1888. *Educ.*: The Oratory School, Queen's College, Oxford and Caen Univ., France, Joined Forbes, Forbes, Campbell & Co., Ltd. and came to Bombay in 1912; served with Grenadier Guards in 1917 and 1918 in France ending up as Captain. *Address:* Mount Ida, Cumballa Hill, Bombay.

BUNDI, H. H. MAHARAO RAJA, SIR RAGHUBIR SINGHJI BAHADUR, G.C.S.I., 1919; K.C.S.I., *cr.* 1897, G.C.I.E. *cr.* 1900, G.C.V.O. *cr.* 1911; *b.* 26 Sept. 1869. *S.* 1889. *Address:* Bundi, Rajputana.

BURDWAN, SIR BIJAY CHAND MAHTAB, MAHARAJADHIRAJA BAHADUR of, G.C.I.E.: *cr.* 1924, K.C.S.I., *cr.* 1911; K.C.I.E., *cr.* 1909: I.O.M., *cr.* 1909; F.R.G.S., F.R.S.A., F.R.C.I., F.N.B.A., M.R.A.S.; Hon. LL.D. Camb. and Edin. 1926. *b.* 19 Oct. 1881; a Member of 3rd Class in Civil Division of Indian Order of Merit for conspicuous courage displayed by him in the Overtoun Hall, Calcutta, 7 Nov. 1908; adopted by late Maharajadhiraja and succeeded, 1887, being installed in independent charge of zemindari, 1903; management in intervening years carried on by his father, the late Raja Bun Bihari Kapur; two *s.* two *d.* Burdwan (the Senior Hindu House in Bengal) ranks first in wealth and importance among the great Bengal zemindaris. Has travelled much in India; made a tour through Central Europe, and visited British Isles in 1906, when he was received by King Edward; a Member of Imperial Legislative Council, 1909-12, Bengal Legislative Council 1907-18; temp. Member of the Bengal Executive Council, 1918; Member of the Bengal Executive Council, 1919-24: Vice-President, Bengal Executive Council from March 1922 to April 1924; Member of the Indian Reforms Enquiry Committee, 1924; Member of the Indian Taxation Enquiry Committee, 1924-25; a nominated member of the Council of State, 1926; Delegate from India to the Imperial Conference, London, 1926, when he was received by King George V; Received the Freedom of the Cities of Manchester, Edinburgh and Stoke-on-Trent, 1926. Trustee of the Indian Museum, 1908. President, Agri-Horticultural Society of India, Calcutta, 1911 and 1912; President of the British Indian Association, Calcutta, 1911-18; again from 1925 to 1927; Trustee of the Victoria Memorial Calcutta since 1914; Chairman, Calcutta Imperial (King-Emperor George V. and Queen Empress Mary) Reception Fund Committee, 1911-12; President of the Bengal Volunteer Ambulance Corps and of the Bengalee Regiment Committees during the War. *Publications:* Vijaya Gitika, and various other Bengali poetical works and dramas Studies Impressions (the Diary of a European Tour); Meditations; etc. *Heir:* Maharajadhiraja Kumar Saheb Uday Chand Mahtab, B.A., Dewani Raj of the Burdwan Raj since 1927, Private Secretary to the Maharajadhiraja Bahadur at the Imperial Conference, London, 1926. *b.* 14 Jule 1905. *Address:* The Palace, Burdwan; Bijay Manzil, Alipore, Calcutta; The Retreat, Kurseong, Bengal; Rosebank, Darjeeling; Mosapher Manzil, Agra, U.P., etc.

BURFOOT, HENRY FRANCIS, (Dayasagar) Lt.-Col. March 1867 (Hastings). Became a Salvation Army Officer in 1885. Secretary for the Salvation Army's Publicity and Vernacular Literary work in the Western India Territory. Arrived in Bombay from England in January 1887. *m.* Lieut. Jeeta Bai Galla Borsada 1890. Has held various appointments in N. India, Punjab, Rajputana, Gujarat and Telugu country. Has edited the Gujarati Salvation Army periodicals for the past 20 years. Author and translator of many Salvation Army songs and compiler of several song books in Gujarati, Hindi and Punjabi. Translator of "The Doctrines of the Salvation Army" and "Orders and Regulations for Salvation Army Soldiers" and "Orders and Regulations for Salvation Army Officers" into Gujarati. *Address:* The Salvation Army Headquarters, Morland Road, Bombay.

BURLEY, DR. GEORGE WILLIAM, Wh. Ex., 1906; B.Sc. (Engineering) (London), 1921; D. Sc. (London), 1927; M. I. Mech E., 1923; M.I.E., 1923; M.A.S. Mech. E., 1926; Professor of Mechanical Engineering, Victoria Jubilee Technical Institute, Matunga, Bombay *b.* 1885. *m.* Ella Elizabeth, *e.d.*, Harry Turton. *Educ.:* Sheffield University College and Sheffield University (Applied Science Department). Asstt. Engineer, Yorkshire ElectricPower Co., Engineering Research Student, Sheffield Uni-

versity; Lecturer in Engineering and Head of Machine Tool and Cutting Tool Research Departments; Sheffield University; Technical Manager, Guy Motors, Wolverhampton; and Lecturer in Electrical Engineering, Wolverhampton Technical College. *Publications:* (*Books*) Lathes: their Construction and Operation; The Testing of Machine Tools; Machine and Fitting Shop Practice; Principles and Practice of Toothed Gear Wheel Cutting. (*Papers*): On Machine Tool Design before the Sheffield Society of Engineers and Metallurgists and on Cutting Tools before the Institution of Mechanical Engineers. *Technical Articles*: Upwards of 200 on various Engineering subjects in the Technical Press of England, America and India. *Address:* V. J. T. Institute, Matunga, Bombay.

BURT, BRYCE CHUDLEIGH, M.B.E., B. Sc. (London), I.A.S., Secretary, Indian Central Cotton Committee. *b.* April 29, 1881. *Educ.* Univ. Coll., London, Assistant Lecturer, Liverpool University, 1902-4; Trinidad, British West Indies, 1904-7. Entered the Indian Agricultural Service, January 1908; Dy Director of Agriculture, United Provinces 1908-21; Director of Industries, United Provinces (in addition) 1912-15. *Address:* 25, Wodehouse Road, Fort, Bombay.

BURRELL, PERCY SAVILLE, M.A., C.I.E., Indian Educational Service, Prof. of Philosophy, Allahabad University, *b.* 11 Dec. 1871, *m.* Ethel Marion Jane Bilton. *Educ.:* Leeds Grammar School and Queen's College, Oxford. Assistant Master in various English schools. Appointed to the Indian Educational Service in 1904 and held the posts of Headmaster, Inspector of Schools, Principal of Queen's College, Benares, Asstt. Director of Public Instruction, U. P. Prof. of Philosophy, University of Allahabad. *Publications:* Articles on Plato's Republic in Mind. *Address:* C/o Messrs. Thos. Cook and Son, Berkeley Street, W. 1.

BUTLER, HIS EXCELLENCY SIR MONTAGU, K.C.S.I., C.B., C.I.E., C.V.O., C.B.E., M.A., I.C.S.. Governor of Central Provinces (1925). *b*, 19 May 1873. *m.* Ann, *d.* of the late Dr. George Smith, C.I.E., *Educ.* at Haileybury and Pembroke Coll., Cambridge, Fellow 1895, Hon. Fellow 1925. Served in the Punjab as Asstt. Commr. 1896, junr. sec. to Fin. Commr. Nov. 1900, Asstt. Settl. Officer, 1902; Settl. Officer, Kotah State, 1904: special duty under For. Dept., 1908; ditto under Financial Dept., 1909; Deputy Commr. Lahore district, 1909; Dy. Sec. to Govt. of India (Home Dept.), 1911; special duty as Jt. Sec. to Royal Commn. on the Public Services in India, 1912-15; Deputy Commr, Attock District, 1915-19; ditto Lahore District, 1919. President, Punjab Legis. Council, 1921; Sec. to Govt. of India, Department of Education, Health and Lands, 1922. President, Council of State, 1924. *Address:* Governor's Camp, C.P.

BYRAMJEE JEEJEEBHOY, Sir, Kt. (1928) eldest son of Rustomjee Byramjee Jeejeebhoy, Landlord and Merchant, large landed proprietor owning 9,000 acres in Salsette, *b.* 28th Feb. 1881. *m.* Jerbai Jamsetjee Cursetjee, grand daughter of Sir Jamsetjee Jejeebhoy, 2nd Bart., *Educ.:* St. Xavier's School and College, Bombay. J. P. (1908), Hon. Pres. Magte. 1908-1915, Delegate Parsi Chief Matrimonial Court (1909-1925), Chairman, Standing Committee of Bombay Municipal Corporation (1924), Member, Bombay Municipal Corporation from 1914, Member, Board of Film Censors from 1924, Member, Govt. of India Committee for Conditional Release of Prisoners 1924, Chairman, Byramjee Jeejeebhoy Parsi Charitable Institution and 32nd Bombay Parsi Pioneers Boy Scouts and Hon. Treasurer, Bombay Presidency Released Prisoners' Aid Society. Donated a sum of Rs. 2,00,000 for the foundation of an Hospital for Children, it being the first of its kind in India. Sheriff, Bombay for 1927. *Address* The Cliff, Ridge Road, Bombay.

CAIRNS, JAMES, O.B.E. (1919), J.P., M.A., M.B., Ch.B. (Glas.), D.P.H. (Camb.), Chief Medical Officer, North Western Railway. *b.* 12th July 1885. *Educ.:* University of Glasgow. House Surgeon, House Physician, Glasgow Royal Infirmary and Victoria Infirmary, Glasgow; Asst. to Professor of Anatomy, Glasgow University; Resident Physician, Ruchell and Knightswood Hospitals, Glasgow; Sanitary Officer, 34th General Hospital; Major R.A.M.C. (Temp.); Dy. Assistant Director, Medical Services (Sanitary), 8th Lucknow Division; Senior Assistant Health Officer, Bombay Municipality; Principal Medical and Health Officer, G.I.P. Railway and Major, Auxiliary Force Medical Corps. *Address:* C/o The Agent, North-Western Railway, Headquarters Office, Empress Road, Lahore.

CALCUTTA, BISHOP OF, MOST REV. FOSS WESTCOTT, D. D. *b.* 23 October 1863. *s.* of the Rt. Rev. B. F. Westcott (late Bishop of Durham). *Educ.:* Cheltenham and Peterhouse, Cambridge. Joined the S. P. G. Mission, Cawnpore, 1889. Bishop of Chota Nagpore, 1905. Bishop of Calcutta and Metropolitan in India, 1919. *Address:* Calcutta.

CALVERT, HUBERT, B.Sc. (Lond.), C.I.E. (1925), I.C.S. *b.* 30 Nov. 1875. *m.* Oclanis, *d.* of late Edward O'Brien, I.C.S. *Educ,* Univ. Coll. and St. Thomas' Hospital, London and King's Coll., Cambridge. Entered I.C.S. 1897; arrived India 1898; Asstt. Commr. and Deputy Commr. Special Duty in Western Thibet, 1906; Registrar, Co-operative Societies 1916 to 1925; Member, Legislative Assembly 1923-26; Member, Royal Commission on Agriculture, 1924-1925; Commissioner, Rawalpindi Division. *Publications:* Laws and Principles of Co-operation (2nd Ed. 1921); The Wealth and Welfare of the Punjab (1922); Co-operative Consolidation of Holdings in the Punjab (Agric. Jour. of India); Progress in the Consolidation of Holdingsin the Punjab (Progs. Indian Economic Assn.); Agricultural Co-operation in India, and The Higher Finance of Agricultural Co-operation in India (International Review of Agricultural Economics); Agricultural

Co-operation in the Punjab; The Reconstruction of the Punjab; The Size and Distribution of Agricultural Holdings in the Punjab; pamphlets and various articles on economic subjects in the Bengal Economic Journal, Indian Journal of Economics, Bombay Co-operative Quarterly, etc. *Address:* Civil Secretariat, Lahore, Punjab.

CAMPBELL, THE HON. MR. JUSTICE ARCHIBALD, B.A., Puisne Judge, High Court, Lahore. *b.* 18 Jan. 1877. *m.* to Violet, youngest *d.* of the late Sir Cecil Beadon, K.C.S.I., Lt.-Governor of Bengal. *Educ:* Harrow and Pembroke Coll., Cambridge. Entered I.C.S. (Punjab) 1901; Asstt. Commr., Registrar, Chief Court, 1912; Offg. Dist. and Sessions Judge 1918; Addl. Judge, High Court 1921; Permanent Judge 1925. *Address:* Lahore.

CAMPBELL, HENRY, Bar-at-Law (King's Inn, Dublin). *b.* 29 March 1879. *m.* Miss Katherine Kippen. Honour man at the John Brooke Scholarship Examination; Ex-Chief Presidency Magistrate (Ag.) Bombay Ex-Clerk of the Crown, Bombay; late Prof. Govt. Law School, Bombay. *Publication:* The Law of Land Acquisition in British India (Tripathi and Co.); Trading with the Enemy (Butterworth); The Law of War and Contract (Oxford University Press). *Address:* Datoobhoy Mansions, Mayo Road, Bombay.

CAREY, SIR WILLOUGHBY LANGER, KT. (1924); Senior Partner, Carey and Daniel formerly Senior Resident Partner, Bird & Co. and F. W. Heilgers & Co. *b.* 12 Oct. 1875. *m.* Elizabeth Georgina Nott (nee Blackie), *Educ.* Wellington College. Came to India, 1901: Vice-President, Bengal Chamber of Commerce, 1922; President, 1923; Bengal Legis. Council, 1920-24; Panel of Dy. Presidents, 1923-24; Sheriff of Calcutta, 1924; Director, Imperial Bank of India, 1922-24; President, 1924; Calcutta, Trustee of Victoria Memorial and Racial Distinctions Committee, 1922; Member, Legislative Assembly, 1924-25. *Address:* Bengal Club, Calcutta.

CAROE, CECIL NIELS, B.A. (Oxon.), Solicitor. *b.* 23 Aug. 1878. *Educ.:* Private and Univ. College, Oxford. *Address:* Pedder Road, Bombay.

CARR, SIR HUBERT WINCH, KT. (1925); Managing Director, Balmer Lawrie & Co., Ltd. *b.* 1877. *m.* to Evelyn Margaret Bruce, elder *d.* of Herbert Johnston, Esq., W. S. Edinburgh. *Educ:* The Abbey, Beckenham, Kent. Tea-planting in Assam, 1898-1901; thereafter joined Balmer Lawrie & Co., Calcutta; became senior resident partner, 1916; Pres. of European Association, 1922-25. *Address:* 7, Alipore Park, Calcutta.

CARROLL, C., Agent, Bengal-Nagpur Railway. *b.* 1877. Joined Bengal Nagpur Rly. as Asstt. Traffic Superintendent, 1901; Dist. Traffic Superintendent from 1904-7; Personal Asstt. to Agent, 1907; Superintendent of Goods, 1909; Dist. Traffic Supdt., Kharagpur, 1910; Supdt. of Goods, 1911; represented B.-N. Rly. on several occasions on Goods Classification Committee of Indian Rly. Confce. Association; was Chairman of Rates Sub-Committee, 1920; attached to Agent's Office as Rates Revision Officer, 1919; Confirmed Supdt., Rates and Development, 1920; Dy. Genl. Traffic Manager, 1922; Commercial Traffic Manager, 1925; apptd. Agent, 1927. *Address:* Calcutta.

CASSELS, LIEUT.-GENERAL SIR ROBERT ARCHIBALD, K.C.B. (1927), C.S.I., D.S.O., Adjutant General, Army Headquarters (1928). *b.* 15 March 1876. *m.* Miss F. E. Jackson (1904) Served in the European war, including Egypt and Mesopotamia. Commanded Peshawar District, 1923-1928. *Address:* Army Headquarters, Delhi and Simla.

CATRY, DR. HECTOR, O. C., Catholic Bishop of Lahore, since March 1928. *b.* 1889, Belgium. *Educ.:* Seraphic School, Bruges. Joined the Capuchin Order at Enghien, 1907; ordained priest, 1914; came to India, 1920. *Address*: 1, Lawrence Road, Lahore.

CAUMONT, RT. REV. MGR. FORTUNATUS HENRY, D.D., O.S.F.C., 1st R.C. Bishop of Ajmer, since 1913. *b.* Tours, 10 Dec. 1871. *Educ.:* Tours. Took his vows, 1890; priest. 1896; joined Mission of Rajputana, 1897; Military Chaplain of Neemuch, 1900 and of Mhow, 1901; Prefect Apostolic of the same Mission, 1903. *Address:* Bishop's House, Ajmer.

CHAMAN LALL, DIWAN, M.L.A., Member, Legislative Assembly, since 1923. *b.* 1892. *Educ:* at Convent of the Sacred Heart, Murree; Gordon Mission College, Rawalpindi; Private Tutors at Folkestone, London and Paris. Joined the Middle Temple in 1910; finished his Bar Final in 1914; took Honours Degree, in Jurisprudence from Jesus College, Oxford, 1917; spent 1918-1919 touring England in connection with the Home Rule Deputation headed by Mr. Tilak; was appointed General Editor of *Coterie*, a London quarterly of Art and Literature; returned to India in 1920; joined the staff of the *Bombay Chronicle* as Asstt. Editor; founded the All-India Trade Union Congress in 1920. *Address:* Lahore (Punjab).

CHAMNEY, LT.-COL. HENRY, C.M.G., 1900; Principal, Police Training College, Surdah. *b.* Shillelagh, co. Wicklow. *m.* 1st, 1907, Hon. Cecilia Mary Barnewall (*d.* 1908); *sister* of 18th Lord Trimleston; 2nd, 1913, Alice, *d.* of Col. W. E. Bellingham of Castle. Bellingham, co. London. *Educ.:* Monaghan Diocesan School. Served South Africa, 1900, first as Major Commanding Lumsden's Horse, and later with South African Constabulary; joined Indian Police, 1909; accompanied the relief column to Manipur in 1891. *Address:* Police Training College, Surdah, Rajshahi, Bengal.

CHANDA KAMINI KUMAR, M.A. (1886), B.L. M. L.A., Advocate, High Court, Calcutta. *b.* Sept. 1862. *m.* Chandraprabha Chaudhuri. *Educ.:* Presidency Coll., Calcutta. Formerly a member of the Assam Council and Governor-General's Council, Fellow, Calcutta University.

versity; Lecturer in Engineering and Head of Machine Tool and Cutting Tool Research Departments; Sheffield University; Technical Manager, Guy Motors, Wolverhampton; and Lecturer in Electrical Engineering, Wolverhampton Technical College. *Publications:* (*Books*) Lathes: their Construction and Operation; The Testing of Machine Tools; Machine and Fitting Shop Practice; Principles and Practice of Toothed Gear Wheel Cutting. (*Papers*): On Machine Tool Design before the Sheffield Society of Engineers and Metallurgists and on Cutting Tools before the Institution of Mechanical Engineers. *Technical Articles*: Upwards of 200 on various Engineering subjects in the Technical Press of England, America and India. *Address:* V. J. T. Institute, Matunga, Bombay.

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BUTLER, HIS EXCELLENCY SIR MONTAGU, K.C.S.I., C.B., C.I.E., C.V.O., C.B.E., M.A., I.C.S., Governor of Central Provinces (1925). *b*, 19 May 1873. *m.* Ann, *d.* of the late Dr. George Smith, C.I.E., *Educ.* at Haileybury and Pembroke Coll., Cambridge, Fellow 1895, Hon. Fellow 1925. Served in the Punjab as Asstt. Commr. 1896, junr. sec. to Fin. Commr. Nov. 1900, Asstt. Settl. Officer, 1902; Settl. Officer, Kotah State, 1904: special duty under For. Dept., 1908; ditto under Financial Dept., 1909; Deputy Commr. Lahore district, 1909; Dy. Sec. to Govt. of India (Home Dept.), 1911; special duty as Jt. Sec. to Royal Commn. on the Public Services in India, 1912-15; Deputy Commr, Attock District, 1915-19; ditto Lahore District, 1919. President, Punjab Legis. Council, 1921; Sec. to Govt. of India, Department of Education, Health and Lands, 1922. President, Council of State, 1924. *Address:* Governor's Camp, C.P.

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CHAMNEY, LT.-COL. HENRY, C.M.G., 1900; Principal, Police Training College, Surdah. *b.* Shillelagh, co. Wicklow. *m.* 1st, 1907, Hon. Cecilia Mary Barnewall (*d.* 1908); *sister* of 18th Lord Trimleston; 2nd, 1913, Alice, *d.* of Col. W. E. Bellingham of Castle-Bellingham, co. London. *Educ.:* Monaghan Diocesan School. Served South Africa, 1900, first as Major Commanding Lumsden's Horse, and later with South African Constabulary; joined Indian Police, 1909; accompanied the relief column to Manipur in 1891. *Address:* Police Training College, Surdah, Rajshahi, Bengal.

CHANDA KAMINI KUMAR, M.A. (1886), B.L. M.L.A., Advocate, High Court, Calcutta. *b.* Sept. 1862. *m.* Chandraprabha Chaudhuri. *Educ.:* Presidency Coll., Calcutta. Formerly a member of the Assam Council and Governor-General's Council, Fellow, Calcutta University.

Publications : Presidential Address, 1st Surma Valley Conference, 1906 ; Presidential Address, Special Session, Bengal Provincial Conference, 1919 ; Presidential Address, All-India Postal and R. M. S. Conference, 1924; Chairman, Reception Committee, Literary Conference, 1914-1915 and 1928. *Address:* Silchar, Assam.

CHARANJIT SINGH, SIRDAR; Chief of the Punjab ; Fellow, R. G. S.; Member, Royal Society of Arts, member of Kapurthala ruling family ; *b.* 1883 ; *s.* of Kanawa Sochet Singh ; *Educ.:* Jullunder, Chief College, Government College, Lahore. Member, Council of State, 1924. *Address* : Charanjit Castle, Jullunder City ; Chadwick, Simla W.

CHARKHARI, H. H. MAHARAJA-DHIRAJ, SIPAHDAR-UL-MULK MAHARAJA ARIMARDAN SINGH JU DEO. BAHADUR. *b.* Jan. 1903, S. 1920. *Educ. :* Mayo Coll., Ajmer; invested with full Ruling Powers on December 6th, 1924. *Address :* Charkhari State, Bundelkhand.

CHATTERJEE, SIR ATUL CHANDRA, K.C.I.E., (1925). High Commissioner for India (1925). *b.* 24 Nov. 1874 *Educ.:* Hare School and Presidency Coll Calcutta, and King's Coll. Cambridge; *m.* (1) Vina Mookerjee (deceased) (2) Gladys M. Broughton, O.B.E., D. Sc. Entered I.C. S., 1897; Served in U. P. Special inquiry into industries in U. P., 1907-08 ; Registrar, Co-operative Societies, U.P., 1912-16 ; Revenue Sec., U. P. Govt., 1917-18; Ch. Sec., U. P. Govt., 1919 ; Govt. of India delegate to International Labour Confce., Washington, 1919 and Geneva, 1921, 1924, 1925-1926 and 1928 ; President, International Labour Conference, 1927 and to League of Nations Assembly, 1925; Representative of India on Governing Body, International Labour Office ; Vice-President of the Economic Consultative Committee of the League of Nations:has been Member of Imperial Economic Committee since 1925; Member, Munitions and Industries Board, 1920 ; Secretary to the Government of India, Department of Industries, 1921 ; Member of the Viceroy's Executive Council in Charge of Industries and Labour ; Member of the Legislative Assembly, 1921-24. *Publication :* Note on the Industries of the United Provinces (1909). *Address* : 42, Grosvenor Gardens, London, S.W. 1.

CHAUBAL, SIR MAHADEV BHASKAR, K.C.I.E., *cr.* 1917 ; C.S.I., 1911 ; B. A., LL.B.; *b.* 15 Sept. 1857 ; *m.* Anandibai, only *d.* of Parashram S. Gupte, 1870. *Educ.* : Government High School, Poona ; Deccan College, Poona ; Assistant Master, Elphinstone High School, Bombay, 1879-83 ; Vakil, High Court, Bombay, 1883 ; Govt. Pleader, High Court, Bombay, 1906 ; Acting Puisne Judge, High Court Bombay, 1908 ; Member of the Executive Council of the Governor of Bombay, 1910-12 and 1915-17; Member of the Public Services Commn., 1913-15; Chancellor, Indian Women's University, 1920; Vice-Chairman and Chairman, Deccan Education Society, President of Commission to try Election petitions at Belgaum and Dharwar, 1924; to try election petitions at Sholapur and Ahmednagar, 1927. *Address :* 6, Finance Office Road, Poona.

CHAUDHARI, JOGES CHANDRA, B.A. (Oxon), M.A. (Cal.), Bar.-at-Law. *b.* 28 June 1863. *m.* Sarasibala Devi, 3rd *d.* of Sir Surendranath Banerjea. *Educ.:*Krishnaghar Collegiate School, Presidency College, Calcutta, St. Xavier's College, Calcutta and New College, Oxford. For some time Lecturer of Physics and Chemistry at Vidyasagar College, Calcutta ; Editor, Calcutta Weekly Notes since 1896; Organising Secry., Indian Industrial Exhibitions in Calcutta in 1901-1902 and 1906-7; Member, Bengal Council, 1904-7; Member, Legislative Assembly, 1921-1923; Fellow of the Calcutta University, 1927. *Publications:* Calcutta Weekly Notes. *Address:* 3, Hastings Street, and "Devadwar," 34, Baligunge, Circular Road, Calcutta.

CHAUDHRI LAL CHAND, HON. LIEUTENANT THE HON. RAO BAHADUR, B.A., LL.B., O.B.E., *b.* 1882. *m.* Shrimati Sushila Devi, belonging to a Sikh Jat. Family of Ferozepur Dist. *Educ.:* St. Stephen's College, Delhi. Joined Revenue Department, 1904 ; took LL.B. degree 1912 and practised as lawyer at Rohtak; elected Vice-Chairman, District Board, 1914-17; elected Punjab Council, 1926; nominated Council of State, 1922 ; Presdt., All-India Jat Maha Sabha, 1918 (elected) ; Manager of High School for Sons of Soldiers; hon. recruiting officer during War. Minister, Punjab Government (resigned in 1924); Revenue Member, Bharatpur State, 1924 and President, State Council, 1926-1927. *Address :* Bharatpur, Rajputana.

CHETTIAR, THE HON. DEWAN BAHADUR SIR S. R. M., SIR ANNAMALAI CHETTY, Banker and Member of the Council of State, *b.* 1881. Has been a member of Madras Legislative Council; Member of the Local Board of the Imperial Bank of India ; Manager and founder of the Sri Meenakshi group of institutions at Chidambaram ; Sri Minakshi College (2) Shri Minakshi Sanskrit College, (3) Shri Minakshi Tamil College, and (4) Shri Minakshi Oriental Training College ; is a life member of the Senate of the University of Madras; is a member of the Nattukkottai Chetty Community. *Address :* Natana Vilas, 38, Police Commr.'s Rd., Vepery, Madras.

CHETTY, R. K. SHANMUKHAM, B.A., B.L., Lawyer and Member, Legislative Assembly, *b.* 17 Oct. 1892. *Educ.:* The Madras Christian College. Elected as a member of the Madras Legis. Council in 1920 ; was appointed Council Secretary to the Development Minister in 1922 ; in Oct. 1922 was deputed by the Madras Govt. to report about measures of Temperance Reform in Bombay, Bengal and the United Provinces. Elected in 1923 as member, Legislative Assembly. Visited England in May 1924 as one of the members of the Deputation sent by the National Convention of India; visited Australia as Indian representative on the Delegation of the Empire Parliamentary Association in September 1926 ; was re-elected uncontested to Legis. Assembly in the General Election of 1926; Chief Whip of the Congress Party in Legislative Assembly

was nominated by the Government of India as Adviser to the Indian Employers' Delegate at the Eleventh Session of the International Labour Conference held at Geneva in June 1928. *Address:* "Hawarden," Race Course, Coimbatore.

CHINOY, SULTAN MEHERALLY, J.P., and Hon. Magistrate, Merchant, Managing Director in the firm of F.M. Chinoy & Co., Ltd., *b.* 16th February 1885, *m.* Miss Sherbanoo Ludhabhoy Ebrahim. *Educ.*: Bharda New High School and Elphinstone College. Founded the well-known firm of Automobile Distributors and Engineers, the Bombay Garage, now situated at Meher Buildings, Bandstand, Chowpatty. Mainly responsible for the Wireless Industry in India; Director of the Indian Radio Telegraph Co., Ltd. and the Indian Broadcasting Co., Ltd. *Address:* Meher Manzil, Carmichael Road, Cumballa Hill, Bombay.

CHINTAMANI, CHIRRAVOORI YAJNESWARA, Chief Editor of *The Leader* of Allahabad. *b.* 10 April 1880, *m.* Srimati Krishnavenemma, *Educ.*: Maharaja's College, Vizianagram, Editor of *The Leader*, Allahabad, 1909-20; Member, U. P. Legislative Council, 1916-1923; and again since 1927: Delegate of the Liberal Party to England, 1919; General Secretary, National Liberal Federation of India; President, ibid, 1920: Minister of Education and Industries, U.P., 1921-23. *Publications:* Indian Social Reform. 1901; Speeches and Writings of Sir Pherozeshah Mehta, 1905. *Address:* Gauri Nivas, 20, Hamilton Road, Allahabad.

CHITNAVIS, SIR GANGADHAR MADHAV, K.C.I.E., C.I.E.; *b.* 1863; selected to represent Central Provinces on Impl. Legislative Council, 1893-1895, 1898-99; King's guest at the Coronation of King Edward VII, 1902; President of C. P. and Berar Provincial Conference, 1906; additional member of Viceroy's Legislative Council, 1907; elected representative of landholders in the Imperial reformed Council, 1910-1916; Nominated Member of Imp. Legis. Council from 1918; landholder in C. P.; President, Nagpur District Council, 1888-1924; President, Central Provinces Legis. Council, (1921-1925); President, Nagpur Municipality, 1896-1918. *Address*: Nagpur, Central Provinces.

CHITNAVIS, SIR SHANKAR MADHAV, KT. (1926), B.A., Kaiser-i-Hind Gold Medal (1901), Imperial Service Order (1914); President, C. P. Legislative Council. *b.* Dec. 3, 1863; *m.* Parvatibai. *Educ.:* Free Church Mission School, Nagpur and then at Elphinstone College, Bombay. Appointed Probationer for Civil Service under the Statutory rules, 13 July 1885; confirmed as Assistant Commissioner, 5th Oct. 1887; appointed Deputy Commissioner, December 1896; a member of the Indian Factory Labour Commission, 1907-08; officiated as Divisional Commissioner, 1909-10; retired from Service 1st March 1916; was Minister to C. P. Government from 18 Dec. 1920 to 27 March 1924. *Address:* Near Mental Hospital, Nagpur, C. P.

CHOKSY, SIR NUSSERWANJEE HORMASJEE, Kt. (1929) C.I.E., 1922; Khan Bahadur (1897); Chevalier of the Crown of Italy (1899); Medallistedes Epidemies Republique Francaise (1906); M.D. (Hon. Causa), Freiburg, F.C.P.S. (Bombay), L.M. & S. (Bombay 1884); Member, Bombay Medical Council, 1912-28; Vice-President, College of Physicians and Surgeons, Hon. Secretary, Governor's Hospital Fund for Bombay and the British Empire Leprosy Relief Association, Bombay Presidency Branch. *b.* 7 Oct. 1861; *m.* Serenbai Maneckjee Jhaveri, *Educ.*: Elphinstone High School and Grant Medical College, Medical Superintendent, Acworth Leper Asylum, 1890-97; Medical Superintendent of Arthur Road Plague and Infectious Diseases Hospital (1888-1921) and Maratha Plague Hospital (1902-1921). *Publications*: Numerous publications on Plague, Cholera. Relapsing Fever, Leprosy, Special reports connected with these subjects, etc. *Address:* Nepean Sea Road, Malabar Hill.

CHRISTOPHERS, LIEUT.-COL. SAMUEL RICKARDE, M.B., C.I.E., O.B.E., I.M.S.; F.R.S., Director, Central Research Institute. *Address:* Central Research Institute, Kasauli.

CLARKE, MAJOR ROBERT WILLIAM, A.M. Inst. C.E., M.I.M.E., H.M. Trade Commissioner, Bombay. *b.* 20 Jan. 1872. *m.* Dorothy Ann St. Aubyn, *d.* of late Major W. J. St. Aubyn, Durham Light Infantry. *Educ:* at Malvern College and the Sheffield School of Mines. North West Ry., Central Provinces, and Western Bikaner State, from 1895-1901. Serve, as Midning and Civil Engineer in Australia, Canada, British North Borneo, Russia, Roumania and Spain. Joined 5th Batt. York and Lancaster Regiment, August 1914, and served in France till March 1919. Seconded to Foreign Office, March 1919 and served on Railway Mission to Poland, Economic Mission in Central and Eastern Europe, and as Economic Expert to the Interallied Plebiscite Commission in Upper Silesia up to September 1922. Was Member of the Economic Experts Conference in Paris, 1921 and Foreign Office delegate to the League of Nations on the Upper Silesian question, 1921. Lectured before the British Institute of International Affairs, May 1923 on "The Influence of Fuel on International Politics." *Address:* Exchange Buildings, Ballard Estate, Bombay.

CLARKE, WALTER DOUGLAS MONTGOMERY, H. M. Trade Commissioner, Calcutta. Born 3rd March, 1890. *Educ*: High School, Kelso and Trinity College, Glenalmond. In business in Burma and India, 1911-1921; joined Indian Army Reserve of Officers, 1915; served with 38th Dogras, Mohmand campaign, 1915-16; appointed Asstt. Cable Censor, Madras, 1916; and Deputy Controller (Hides), Indian Munitions Board, Bombay, 1918-19; Hon. Secretary,

Cochin Chamber of Commerce and Member, Cochin Harbour 'ad hoc' Committee, 1921. *Address:* Bengal Club, Calcutta.

CLAYTON, HUGH BYARD, C.I.E. (1924); I.C.S.; On Special Duty in General, Ecclesiastical and Marine Department, Bombay. *b.* 24 Dec. 1877. *m.* Annie Blanch Nepean. *Educ.:* St. Paul's School, Wadham College, Oxford. 1st Class Hon. Mods. 1st Class Lt. Hum. Came to India 1901; served in Bombay Presidency: employed in Military Intelligence Branch of War Office, 1914-19. Municipal Commissioner, 1919-1928. *Address:* Cumballa Hill, Bombay.

CLOW, ANDREW GOURLAY, M.A., J.P., F.S.S C.I.E. (1928); Indian Civil Service, Secretary, Labour Commission (1929) *b.* 29 April 1890, *m.* Ariadne Mavis Dunderdale, 1925. *Educ:* Merchiston Castle School, Edinburgh, St. John's College, Cambridge. Served in U. P. as Asstt. Collector, Assistant Settlement Officer and Settlement Officer, 1914-20; Controller, Labour Bureau, Govt. of India, 1920-23, Chairman, Seamen's Recruitment Committee, 1922; Secretary, Workmen's Compensation Committee, 1922; Under-Secretary to Government of India, 1923-4; Adviser and delegate, International Labour Conferences, Geneva, 1921 and 1923; Dy. Secretary to Government of India; Department of Industries and Labour, 1924-7; Member, Legislative Assembly, 1923, 1925-27. *Publications*: Indian Factory Law Administration (1921); The Indian Workmen's Compensation Act (1924); Indian Factory Legislation, a Historical Survey (1927), etc. *Address:* 9, Hastings Road, New Delhi.

COCKE, SIR HUGH GOLDING, Kt. (1929) Chartered Accountant; Partner, A.F. Ferguson & Co., Chartered Accountants, Bombay, Karachi, Delhi and Lahore *b.* 1st June 1882. *m.* Winifred Florence, *d.* of A. E. Cumming, late of Karachi. *Educ*; at Merchant Taylors' School, London, Joined A. F. Ferguson & Co., Bombay, in Feb. 1907; represented Bombay Chamber of Commerce on Bombay Improvement Trust 1919 and Bombay Municipality 1919-23; Member, Legislative Assembly from 1924; Public Accounts Committee, 1924-27; Railway Finance Committee 1926-28; Hon. Presidency Magistrate, 1924; President, Bombay Chamber 1928. *Publications*: A Summary of the Principal Legal Decisions affecting Auditors. *Address:* A. F. Ferguson & Co., Apollo Street, Bombay.

COLVIN, GEORGE LETHBRIDGE, C. B. (1919), C.M.G. (1918); D.S.O. (1916); Commendatore of the Order of St. Maurice and St. Lazars (Italy), 1920; A. D. C. to H. M. King (1928). Agent, East Indian Railway. *b.* 27 March 1878. *m.* Katherine Mylne, *d.* of James Mylne of Edinburgh. *Educ:* Westminster. Joined E. I. Railway 1898; served in Army (France and Italy) during war, 1914-1919; Hon. Brigadier-General in Arm Director; of Development Ministry of Transport, London, from 1919 to 1921. Rejoined E. I. Rly. in 1921 as Agent. *Address:* Bengal Club, Calcutta.

CONNOR, LIEUT.-COLONEL SIR FRANK POWELL, KT. (1926), D.S.O., F.R.C.S., I.M.S., Professor of Surgery, Medical College, Calcutta. *b.* 1877. *m.* Grace Ellen Lees, *d.* of late R. O. Lees. *Educ*: St. Bartholomew's Hospital London. Indian Army, Civil in Bengal; War service in France and Mesopotamia (mentioned in Despatches four times, D.S.O., Brevet Lieut.-Colonel); Professor of Surgery, Medical College. *Address*: 2, Upper Wood Street, Calcutta.

CONTRACTOR, MISS NAVAJBAI DORABJI, B. A., J.P., Hon. Presidency Magistrate; Lady Superintendent, Chanda Ramji High Girls' School, Bombay. *Educ:* Wilson College, Bombay. First Indian Lady Fellow in Arts in the Bombay University (1922); an extensive traveller throughout India, Burma and Ceylon; and in China, Japan, United States of America and Europe. *Publications:* Contributions on topical educational and social subjects in English and Gujarati in periodicals and newspapers published in Bombay. *Address:* Hardinge House, Gowalia Tank Road, Bombay.

COOKE, Major-GENERAL HERBERT FOTHERGILL, K.B.E. (1924); C.B. (1919); C.S.I. (1921), D.S.O. (1917); I.A.; Commanding Sind-Rajputana District from April 1924. *b.* 13 Nov., 1871. *m.* 1923, Harriet Mary Hornby. *Educ.:* All Hallows School, Honiton; R.M.C., Sandhurst. First Commission, 1892; joined Indian Army, 1893; Captain, 1901; Major, 1910; Brevet Lt.-Col., 1912; Substantive Lt.-Colonel, 1916; Bt.-Col., 1917; Substantive Colonel, 1917; Temporary Major-General (1918); Substantive Major-General (1921), served Chitral, 1895 (medal and 1 clasp); Tirah, 1897 (2 clasps); Waziristan, 1902 (clasp); Tibet Expedition and March to Lhassa, 1904 (medal and clasp); European War, from Jan. 1915 to October 1917 (despatches seven times, C.B., D.S.O., Bt.-Col.); several years on Staff Appointments in India including 4 years as Dy. Adjutant-General in India and officiating Adjutant-General from March to Sept. 1920. Military Secretary, Army Headquarters, 1922-24. *Address:* C/o Messrs. Grindlay & Co., Bankers.

COPPEL, RT. REV. FRANCIS STEPHEN, R. C. Bishop of Nagpur, since 1907.; *b.* Les Gets Savoy, 5 Jan. 1867. *Educ.:* College of Evian. University of France, Lyons, B.A., B. Sc. Entered Congregation of Missionaries of St. Francis de Sales, Annecy; Priest, 1890; sent to India for mission of Nagpur, 1892; for fifteen years attached to St. Francis de Sales College, Nagpur, as professor and principal. *Address:* Nagpur.

CORBETT, GEOFFREY LATHAM, M.A. (Oxon.), C.I.E. (1921); Joint Secretary, Commerce Department, Government of India. *b.* 9 Feb. 1881. *m.* Gladys Kate, *d.* of late George Bennett, Esq., Littes Rissington Manor, Glos. *Educ:* Bromlgrove School, Hertford Coll., Oxford, 1st Class. Hon. Mods. (1902), 1st Class Lit. Hum. (1904). Passed into I.C.S., 1904;

Asstt. Commissioner, C. P., 1905-09; Settlement Officer, Saugor, 1910-16; Dy. Commissioner, C. P., 1916-18; Dir. of Industries and Dy. Secretary, C. P., 1918; Dy. Secretary, Com. Depart., Government of India, 1919-21; on deputation, South and East Africa, 1920; Washington Disarmament Conference, 1921; Fiji Islands, 1922; Director of Industries and Registrar, Co-operative Credit Societies, C. P., 1923; Offg. Secretary, Commerce Department, Government of India, 1923-24. *Address:* Commerce Department, Government of India, Delhi and Simla.

COTELINGAM, JOHN PRACASA RAO, M.A., F.M.U., Retired Principal of Wardlaw College, Bellary, 1891-1918. *b.* 9th Dec. 1860. *m.* Miss Padmanji, *d.* of the Rev. Baba Padmanji of Bombay. *Educ.*: Madras Christian Coll. Asstt. Master, London Mission High School, Madras; Headmaster, Wesley Coll.; Principal, Hindu Coll., Cuddalore, 1889-1891; Member, Bellary Dist. Board and Taluk Board since 1895; Vice-Presdt., Dist. Board, 1901-4; Member, Bellary Municipal Council since 1893; Presdt., District Educational Council, Bellary, 1921-24. Represented Indian Christian Community and Madras Presidency on the Legislaive Assembly, 1921-23. *Address:* Rock Cottage, Bellary.

COTTERELL, CECIL BERNAD, C.I.E., I.C.S.. Member Board of Revenue, Madras 1928, *m.* 1922. *Educ*; St. Peter's School, York, Balliol Collge, Oxford. Entered I.C.S., 1898; has served in the Madras Presidency, since 1899; Deputy Commissioner Salt, and Abkari Dept., 1905; Private Sec. to Governor of Madras 1912-15. Secretary to Government, Local Self-Government. *Address:* Madras.

COTTON, CHARLES WILLIAM EGETON, C.I.E., (1920), Second Secretary to the Govt. of Madras, 1928. *b.* 1874. *Educ.:* Eton and Univ., Coll.. Oxford; I.C.S., 1897. District work in Madras until 1907 when appointed Asstt. Director of Statistics, Calcutta; Offg. Dir.-Genl., Commercial Intelligence, 1908-10; Offg. Dir. of Industries, Madras, 1909-10; Dy. Secy. to the Govt. of Madras, 1911-12; Dy. Secy., Govt. of India, 1912-15; Collector of Customs, Calcutta, 1916-21; Director of Industries, Madras 1921. A. G. G. Madras States 1923-28. *Publications:* Review of the Trade of India, 1908 and 1910; Calcutta Chatterbox, 1918; Handbook of Commercial Information, 1919, 2nd Edition, 1924. *Address:* Brodie Castle, Adyar, Madras.

COUBROUGH, ANTHONY CATHCART, C.B.E. (1918); M.A., B.Sc., C.E., M.I.E.E., M.I. MECH. E., M.I.E. (Ind.); Director, Messrs. Mather and Platt, Ltd. *b.* 10th Feb. 1877. *Educ.*: Glasgow University. Joined Mather and Platt, Ltd., in 1898 as apprentice, subsequently became General Manager, Electrical Department and in that capacity travelled widely on the Continent went to India and South Africa and eventually returned to India to establish Mather and Platt's own office in Calcutta, Bombay and other centres for the control of their business from Mesopotamia to the Straits; has travelled in China, Japan, United States of America, Australia and Egypt. During war services were lent to Govt. of India; under Munitions Board, was Controller of Priority and latterly Controller of Munitions Manufacture. *Publications*: Pamphlets on Technical and Economic subjects. *Address*: 7, Hare Street, Calcutta.

COUSINS, JAMES HENRY, Doctor of Literature of Keiogijuku University, Japan, (1922), Principal, Brahmavidya Ashrama (School of International Culture), Adyar, Madras. *m.* Margaret E. Cousins, B. Mus. J.P. (1903). *Educ.:* at various schools in Ireland and partly in Trinity College, Dublin (Teachers Course). Private Secretary to Lord Mayor of Belfast; Asstt. Master, Belfast Mercantile Academy; Asstt. Master, High School, Dublin; Reporter to Royal Academy of Medicine in Ireland; Demonstrator in Geography and Geology, Summer Course, Royal Col. of Science, Ireland; Asstt. Editor, "New India," Madras; Principal, Theosophical College, Madanapalle; Fellow and Prof. of English, National University, Adyar; University Extension and Post Graduate Lecturer, Calcutta University, Benares Hindu University, Mysore University; Visiting Lecturer, Tagore's Visva-Bharati, Bengal; Registrar, The Theosophical World University, Adyar Centre-Organising Secretary, The Theosphical World University Association (India); Genl. Editor, Theosophical World University Text-books; a co-founder of the Irish Literary and Dramatic Revival (1900, etc.); poet, dramatist, critic, educationists, philosopher. *Publications:* (Prose) A text-book of Modern Geography, The Wisdom of the West, The Bases of Theosophy, The Renaissance in India, The Kingdom of Youth, Foot-steps of Freedom, New Ways in English Literature, Modern English Poetry, The Cultural Unity of Asia, The Play of Brahma, Work and Worship, The New Japan, The Philosophy of Beauty, Heathen Essays, Samadarsana; (Poetry) Ben Madighan, Sung by Six, The Blemished King, The Voice of One, The Awakening, The Bell Branch, Etain the Beloved, Straight and Crooked, The Garland of Life, Ode to Truth, Moulted Feathers, The King's Wife (drama), Sea-Change, Surya Gita, Forest Meditation, Above the Rainbow. A Tibetan Banner. *Address:*— Theosophical Society, Adyar, Madras.

COUSINS, MRS. MARGARET E., Bachelor of Music (Royal University of Ireland, 1902), Honorary Secretary, Women's Indian Association and Hon. Magistrate, Madras. *b.* 7 Nov. 1878. *m.* Dr. J. H. Cousins. *Educ.*: Dublin and Londonderry. Solo pianist before marriage; afterwards became interested in reform movements in addition to music; Secretary, Irish Vegetarian Society; Hon. Treasurer and foundation member of Irish Women's Franchise League, a militant suffrage society in which she worked for seven years and suffered imprisonment twice in the cause. Left Ireland 1913; spent two years in Liverpool, came to India in Oct. 1915. *Publications:* articles in many newspapers and magazines; author of "The Awakening of Asian Womanhood." *Address:* Leadbeater Chambers, Adyar, Madras.

COX, VEN. LIONEL EDGAR, M.A., Senior Chaplain, St. George's Cathedral, Madras and

Archdeacon of Madras. *b.* 28 March 1868. *Educ.:* Somerset College; Bath; Dorchester Theological College; Durham University. Deacon, 1891; Priest, 1894; joined Madras Ecclesiastical Establishment, 1898; Archdeacon of Madras and Bishop's Commissary, 1910. *Address:* Cathedral, Madras.

CRAIK, HENRY DUFFIELD, B.A. (OXON.), C.S.I., (1924), Financial Commissioner, Punjab, *b.* 2nd January 1876. *m.* to E. H.d'O.; Baken-Carr, *Educ:* Eton and Pembroke Coll., Oxford. Joined I.C.S. 1899 and served in the Punjab and with the Government of India in various capacities since then. *Address:* C/o. Civil Secretariat, Lahore.

CRERAR, JAMES, C.S.I. (1922); C.I.E. (1917), Home Member, Govt. of India since July 1927, *b.* 1877. *m.* to Evelyn, *d.* of the late Hon. Charles Brand. Educated at George Watson's College, Edinburgh; Edinburgh University and Balliol College (Oxon). Assistant Collector, Sind; Manager of Encumbered Estates, Sind; Assistant Commissioner in Sind; Deputy Municipal Commissioner, Bombay; Municipal Commissioner, Bombay; Private Secretary to H. E. the Governor of Bombay; Sec. to Govt. of Bombay, Home Dept. Secretary to the Govt. of India, Home Dept., Acting Home Member, Government of India, 1926. *Address:* The Secretariat, Delhi or Simla.

CROSTHWAITE, REV. CANON ARTHUR Exhibitioner of Pembroke College, Cambridge B.A. (Sen. Opt.), 1892, Delhi Durbar Medal 1911, Kaisar-i-Hind Medal, 1st Class, 1923 Missionary, S.P.G. *b.* 2 Nov. 1870. *m.* to Kate Louisa Barlow. *Educ.:* at S. Peter's School York and Pembroke College, Cambridge Missionary, S. P. G. and Vice-Principal Christ Church College, Cawnpore, 1893-1909 Principal, 1910-1912; Fellow of Allahabad Univ., 1905; Hon. Fellow, 1913; Chaplain of Moradabad and Head of S. P. G. Mission 1909-10 and 1912 to present date, Canon of All Saints' Cathedral, Allahabad, 1921 *Publications:* "The Lessons of the Rig Veda for Modern India," "Patriotism," "Theosophy," Commentary on II Corinthians in The Indian Church Commentary Series. "Tasf wiron par sawal o jawab." "Du'a ki kitab par sawal o jawab," "Asha-i-Rab bani ki tartib par sawal o jawab." *Address:* S. P. G. Mission, Moradabad, U.P.

CRUMP, LESLIE MAURICE, C.I.E. (1921) Resident at Mysore, (1928). *b.* 12 September 1875. *m.* Jean Dunlop McKerrow, *d.* of Dr. George McKerrow of Ayr, Scotland, 1 *s.* 1*d.* *Educ.:* Merchant Taylors School, Merton Coll., Oxford; Rugby football blue, 1896-97. Entered I.C.S., Bengal, 1898. Pol. Dept., Govt. of India, 1900. Served in Hyderabad, N. W. Frontier, Central India, Phulkian States, Baroda, Gwalior and Hyderabad. *Publications:* The Marriage of Nausican and The Severing Seas, The Lady of the Lotus. *Address:* The Residency, Mysore.

CUMING, THE HON. SIR ARTHUR HERBERT, KT., (1928) Judge High Court, Calcutta, *b.* 24 No. 1871. *m.* Beryl Christine Austen. *Educ.:* Westminster School, Oriel College, Oxford. Appointed to Indian Civil Service. 1893, came to India, 1894; served as Assistant Magte. Bengal; Dy. Commr., Assam; Dist. and Sessions Judge, Eastern Bengal and Assam; officiated as Legal Remembrancer, Bengal; officiated as Judge, High Court, from 1916; apptd. Judge, High Court, Nov. 10, 1921. *Address:* 2, Alipur Park, Calcutta.

CUTTRISS, C. A., M.B.E., F.R.G.S, F.R.S.A. Landlord Hon. Magistrate, Rangoon. *b.* 28 Nov. 1868, *m.* Janet, *d.* of Dr. Hayter, M. D.; was Hon. Sec. Burma "Our Day" Fund, Burma War Fund, Rangoon Rivercraft Committee and Rangoon Impressment of Shipping Committee during the war. *Publications:* "Memories of Old Rangoon"; "Hints to Arbitrators;" and Essays on Commercial Subjects. *Address:* "Riverside", Kalaw, Burma.

DADABHOY, SIR MANECKJI BYRAMJEE, C.I.E. (1911); Kt. (1921); K.C.I.E. (1925); Member, Council of State. *b.* (Bombay, 30 July 1865. *m.* 1884, Bai Jerbanoo, O. B. E., *d.* of Khan Bahadur Dadabhoy Pallonji of the Commissariat Dept. *Educ.:* Proprietary High School and St. Xavier's College, Bombay. Joined Middle Temple, 1884; called to Bar, 1887; Advocate of Bombay High Court, 1887; Member, Bombay Municipal Corporation, 1880-90; Government Advocate, Central Provinces, 1891; President, Prov. Industrial Conference, Raipur, 1907; President, All-India Industrial Conference, Calcutta, 1911; Member of Viceroy's Legislative Council, 1908-12 and 1914-17, a Governor of the Imperial Bank of India (1920-28). Elected to the Council of State, 1921; and nominated 1926 Member, Fiscal Commission appointed by Govt. of India, Sept. 1921; Member of the Royal Commission on Indian Currency and Finance, 1925-26. Member, Municipal Board, Nagpur, for 37 years; Managing Director, Nagpur Electric Light and Power Co., Ltd., Berar Manufacturing Co., Ltd., and the Model Mills, Nagpur, Limited. Proprietor: Ballarpur, Sasti, Ghugus and Pisgaon-Rajur Collieries; numerous Manganese Mines in the Central Provinces and Berar and Behar and Orissa; Several Gin and Press Factories in all parts of India. *Publications:* Commentary on the Land Laws of the Central Provinces, and Commentary on the Central Provinces Tenancy Act. *Address:* Nagpur, C.P.

DAGA, RAI BAHADUR SETH SIR BISESERDAS, Kt. (1921), Senior Proprietor of the firm of Rai Bahadur Bansilal Abeerchand. Banker, Govt. Treasurer, landlord, merchant, millowner and mine owner, Director, Central Bank of India, of Model Mills, Nagpur, and of Berar Manufacturing Company, Badnera, Chairman, Nagpur Electric Light and Power Company. Life Member of the Countess of Dufferin Fund and member of the Legislative Assembly of the Bikaner State and Vice-Chairman of the Managing Body of the Indian Red Cross Society. *b.* 1877. *m.* Krishna Bai. *Educ:* privately. Second Class Tazim, Bikaner State. *Publications:* Sir Kasturchand Memorial Dufferin Hospital at Nagpur and frequent contributions on public charity. *Address:* Nagpur (C.P.) and Bikaner (Rajputana).

DALAL, ARDESHIR RUSTOMJI, B. A., (BOMBAY); M. A., (CAMBRIDGE), I. C.S., Municipal Commissioner, Bombay. *b.* 24 April 1884. *m.* to toManackbai Jamsetji Ardeshir Wadia. *Educ:* Elphinstone College, Bombay. St. John's College, Cambridge. Asstt., Collector, Dharwar, Colaba, Bijapur, Superintendent, Land Records. Belgaum; Collector, Ratnagiri and Panch Mahals; Deputy Secretary, Govt. of Bombay, Revenue and Finance Departments; Actg., Secretary, Govt. of Bombay, Finance Department; Ag. Secretary, Govt., of India, Education, Health and Land Departments. *Address:* Municipal Commissioner's Bungalow, Carmichael Road, Bombay.

DALAL, SARDAR SIR BOMANJI ARDESHIR, KT. (1927), First Class Sirdar, Zamindar, and Merchant; Member of the Legislative Assembly since January 1921. *b.* 18 April 1854. *Educ.:* Broach and Bombay. *m.* Bai Navazbai Bomanji Dalal. Owns 3,000 acres of land colonizing six thriving villages in out of the way places in Panch Mahals. and Gaekwar Frontier on West and South of his estate. *Address:* Baroda Residency.

DALAL, SIR DADIBA MERWANJEE, Kt. (1924), C.I.E. (1921). Stock and Finance Broker, *b.* 12 Dec. 1870. *m.* 1890; one *s.* three *d. Educ.:* in Bombay. Gave evidence before the Chamberlain Currency Commission (1913); Member of the Committee on Indian Exchange and Currency (1919) and wrote minority report; Chairman, Government Securities Rehabilitation Committee, Bombay (1921); Member of Council of the Secretary of State for India, 19 Nov. 1921 to 25th Jan. 1923: Delegate for India at International Economic Confce., Genoa, and representative for India at the Hague (1922); Member of the Inchcape Committee, 1922-23. Delegate for India at the Imperial Economic Conference (1923). High Commissioner for India in the U. K., 1922-24. *Address:* 1, Marine Lines, Bombay.

DAMLE, RAO BAHADUR KESHAV GOVIND, C.I.E. (1921): High Court Vakil, Akola (Berar). *b.* 25 June, 1868. *Educ.* Akola, Deccan Coll., Poona. Law Class, Bombay. Practised law at Akola since 1895. Member, C. P. Legis. Council, 1914-16. Chairman, Co-op. Central Bank, Ltd., Akola, since 1911. Member of Committee appointed by C. P. Govt. to draw up a scheme of village panchayats. Member of Committee on Co-operative Societies in C. P. appointed by Govt. in 1921; First President of Joint Board of Berar Dist. Boards since 1922; Vice-President, Akola District Board, from 1902 to May 1925; President, Bar Assocn., Akola, for many years. President, Berar Liberals and Member of Co-operative Institute, Berar. *Address:* Akola.

DARLEY, BERNARD D'OLIER, C.I.E. (1919); Chief Engineer, P. W. D., United Provinces. *b.* 24 August 1880. *Educ.:* T. C., Dublin and Cooper's Hill. A.M.I.C.E. Irrigation work in P. W. D. since 1903. *Address:* Lucknow, U. P.

DAS, BRAJA SUNDAR, B.A., Member, Legis. Assembly; Zamindar and Proprietor of a press and cultivation. *b.* July 1880. *m.* to Umasundari, 4th *d.* of Rai Sudam Charn Naik Bahadur. *Educ.:* Ravenshaw Coll. and Presidency Coll., Calcutta. Took part in Utkal Union Conference since its beginning in 1904 and Secry. for two years; Vice-President, Utkalsahitya Samaj; President, Oriya Peoples' Association; Vice-President, Orissa Assocn., and Ramkrishna Sevak Samaj; Was President of Central Youngmen's Association; Member, Sakhigopa Temple Committee; Was Member of Cuttack Municipality and District Board; Member, Bihar and Orissa Council, 1916-1920; Fellow of Patna University and member of the Syndicate. *Publications:* Editor of the Oriya Monthly Muken and of the only English Weekly in Orissa "The Oriya." *Addrses:* Cuttack.

DAS, MAJOR-GENERAL RAI BAHADUR DEWAN BISHAN, C.I.E., C.S.I. *b.* Jan. 1865. *Educ.* at Punjab Government College, Lahore; Private Secretary to Raja Sir Ramsingh, K.C.B., 1886-1898; Mily. Secy. to the Com.-in-Chief, Jammu and Kashmir, 1898-1909; Mily. Secry. to H. H. the Maharaja, 1909-14; Home Minister to H. H, the Maharaja, 1914-18, Rev. Minister, 1918-1921 and Chief Minister, March 1921-April 1922. Retired from Service. *Address:* Jammu and Kashmir.

DAS, MADHU SUDAN, C.I.E. *b.* 28 April 1848. *Educ.:* Calcutta University. M.A., B.L., M.R.A.S., F.N.B.A. Represented Orissa in Bengal Legislative Council four times; Fellow of Calcutta University; elected by Legislative Council of Bihar and Orissa to Imperial Council, 1913; nominated to Legislative Council of Bihar and Orissa. Minister (Local Self-Government), Bihar and Orissa, since Jan. 1921; elected by Municipalities of Orissa to his present seat in Bihar and Orissa Legislative Council. Is the proprietor of Utkal Tannery and of the Orissa Art Wares. Ex-President of All-India Indian Christian Conference; Advocate, Patna High Court. *Address:* Cuttack, B. N. Ry.

DAS, PANDIT NILAKANTHA, M.A., writer of books for children on new lines. *b.* August, 1884. *m.* Srimati Radhamani Debi (1905). *Educ:* Puri Zilla School, Ravenshaw College, Cuttack and Scottish Churches College, Calcutta. Founded with Pt. Gopabandhu Das and others the residential open air private school at Satyabadi on a new line; was Resident Head Master there for 8 years; worked in connection with Puri Famine in 1919; apptd. by Calcutta University for Post Graduate Professorship in 1920 and non-cooperated in 1921. Started Congress organisation and a National High School at Sambalpur and edited "The Seba" in 1921; became Dist. Congress Secretary, Puri, and Prov. Congress President, Utkal, 1922. Imprisoned for four months and fined Rs. 200 in 1923; elected to the Assembly from Orissa in 1924, and again in 1927. *Publications:* Pranayin (a kavya in six cantos); Konarke (a long poem kavya); Mayadebi (a kavya in 6 cantos); Kharabela (a historical kavya in 25 cantos); Dasa Nayak (along poem kavya); Aryajiban (Aryan life, a critical treaties on Aryan civilisation); many other books for children. *Address:* P. O. Sakhigopal, Dist. Puri (Orissa).

DAS, The Hon. Mr. Justice Profulla Ranjan, Judge, High Court, Patna, 1919. *b.* 28 April, 1881. *Educ.:* St. Xavier's College, Calcutta. *m.* Dorothy Mary Evans, 1904. *Address:* Ali Manzil, Patna.

DAVIES, The Rev. Canon Arthur Whitcliffe (Kaisar-i-Hind Gold Medal, 1921); Vice-Chancellor, Aga University, and Principal, St. John's College, Agra. *b.* 1878. *m.* Lilian; Mabel Birney. *Educ:* Uppingham School, Univ. College, Oxford; Church Missionary Society, Lahore, 1906; Ordained Ripon Diocese, 1908; Joined St. John's College, Agra, 1909; Principal, 1913; Canon of Lucknow, 1917. Temporary Member, U. P. Legislative Council, 1926. 1st Vice-Chancellor, Agra University, 1927. *Address:* St. John's College, Agra.

DAVISON, Dexter Harrison, Doctor of Dental Surgery. *b.* 29 Sept. 1869. *m.* Margaret St. Clair. *Educ:* Chicago University. *Address:* Lansdowne House, Lansdowne Road, Apollo Bunder, Bombay.

DE, Kiran Chandra, A.B., C.I.E., I.C.S., Commissioner of Chittagong since 1916: *b.* Calcutta, 19 January 1871. *Educ.:* Presidency College, Calcutta; St. John's College, Cambridge. Registrar of Co-operative Societies, also Fishery Officer, 1905; Magistrate-Collector, Rangpur, 1911; Member of Bengal District Administration Committee, 1913; Press Censor, Bengal, 1914. Secretary to Govt. of Bengal, Genl. Dept., 1915; Member of the Legislative Council of the Governor-General of India, 1920. Commissioner, Presidency Divisions since 1924; Member of the Board of Revenue, Bengal since 1926, Member of the Council of State, 1928. *Address:* 1, Dumdum Road, Cossipore, Calcutta; Brookside, Shillong.

DEHLAVI, The Hon. Ali Mahomed Khan, J.P., Bar.-at-Law (1896); President, Bombay Legislative Council. *b.* 1874. *Educ.:* Bombay and London. Practised in Gujarat and Sind. Started a paper called *Al-Haq* in the interests of Sind Zemindars and edited it for three years. Dewan at Mangrol (Kathiawar) and Palanpur; acted as Judge of the Small Causes Court, Bombay. *Publications:* History and Origin of Polo; Mendicancy in India. *Address:* Council Hall, Bombay.

DE MONTMORENCY, Sir Geoffrey Fitzhervey, K.C.I.E., K.C.V.O., C.B.E., I.C.S., Governor of the Punjab (1928). *b.* 23 Aug. 1876. *Educ:* Malvern; Pembroke College, Cambridge. Entered I.C.S., 1899; Deputy Commissioner, Lyalpur, 1907; Settlement Officer, Chenab, 1907; Junior Secy. to Financial Commissioner, 1911; on special duty in connection with transfer of capital to Delhi, 1912; Personal Assistant and Dy. Commr. till 1918; Dy. Secretary, Foreign and Political Deptt., Govt. of India, 1920-21; Chief Secretary to H.R.H. the Prince of Wales during the Royal Tour in India; Chief Secretary to Punjab Government; Private Secy. to the Viceroy, 1921-26. Member, Punjab Executive Council, 1926-28. *Address:* Lahore and Simla.

DENHAM-WHITE, Arthur, M.B.B.S. (Hons), Lond. 1904, M.R.C.S., L.R.C.P. (Eng.) 1903; F.R.C.S., Civil Surgeon, Alipore, Calcutta. *b.* Feb. 26, 1879. *m.* E. Gratton Geary (nee Davis). *Educ.:* Malvern College and St. Bartholomew Hospital; Gold Medalist Netley. Entered I.M.S., 1905. Resident Surgeon, Medical College Hospital, Calcutta, also Eden Hospital and Presidency General Hospital; active service in Mesopotamia, 1916-18; Offg. Professor of Surgery, Medical Course in 1922; Civil Surgeon, Darjeeling, 1919-1922; Civil Surgeon, Alipore, 1923. *Publications:* Monograph on delayed Chloroform Poisoning; Monograph on Toxic Effects of Organic Arsenic. *Address:* 25, Alipore Park, Calcutta.

DENNING, Howard, B.A. (Cantab.), C.I.E., I.C.S., Controller of the Currency. *b.* 20, May 1885. *m.* Margery Katherine Wemyss Browne. *Educ.:* Clifton College and Caius College, Cambridge, 10th Wrangler. Indian Civil Service, Assistant Collector, Bombay Presidency; Under-Secretary, Finance Department of India, Joint Secretary of Babington Smith Currency Commission, Deputy Controller of the Currency, Bombay, and Controller of the Currency. *Address:* Hastings House, Alipore, Calcutta.

DESHMUKH, Gopal Vinayak, L.M. & S. (Bombay); F.R.C.S. (Eng.), M.D. (Lond.), Consulting Surgeon and Physician. *b.* 4th Jan. 1884. *m.* Annapurnabai, *d.* of Deshmukh of Wun. *Educ.* Morris Coll., Nagpur; Grant Medical College, Bombay; King's College and the London Hospital Medical College, London. House Surgeon to Jordan Lloyd, Professor of Surgery in Univ. of Birmingham at Queen's Hospital; Hon. Major at Lady HardingeHospital during war and Surgeon at J. J. Hospital and Professor of Operative Surgery at Grant Medical College (1920); Professor of Surgery at Goverdhandas Sunderdas Medical College and Hon. Surgeon at King Edward Hospital; Member, Bombay Municipal Corporation from 1922 and President, Bombay Municipal Corporation, 1928. *Publications:* Some papers on Abdominal Surgery; publications on Social Reform, Improving the Position and Status of Hindu Women. *Address:* Chaupati, Bombay.

DESHMUKH, Ramrao Madhavrao, B.A., LL.B., Bar-at-Law, *b.* 25, November 1892. *m.* Shashikala Raje, *d.* of late Sardar Kadam of Gwalior. *Educ.*: at Cambridge. President, All-India Maratha Conference, Belgaum, 1917; Practised at Amraoti in 1918 and at Nagpur, 1919-20; elected to C. P. Legislative Council in 1920 for Amraoti West Constituency; elected to All-India Congress Committee in 1921; elected to Legislative Council in 1923 as Swarajist President of the Maharashtra Conference at Satara in 1925; elected first Chairman of District Council, Amraoti, 1925; elected to the Legislative Assembly in February 1926; elected to the C. P. Council for Amraoti Central Constituency as Responsivist in November 1926. Minister to C. P. Government 1927-1928 *Address:* Secretariat, Nagpur, C. P., and Amraoti (Berar).

DESIKACHARI, SIR TIRUMALAI, DIWAN BAHADUR, Kt. (1922), B.A., B.L., recipient of Kaisar-i-Hind Medal. High Court Vakil. *b.* Sep. 1868. *m.* Cousin, *d.* of Diwan Bahadur T. M. Rangachari. *Educ.:* Pachaiyappa's and Presidency Colleges. Was Member, Madras Legis. Council; President, District Board, Trichinopoly, for three terms till 17 April 1926; Member of the Legislative Council for two terms till 1924; Member, Civil Justice Committee, India, till 1925. Member, Malabar Tenancy Committee, 1927-28. *Address*: "Venkata Park," Reynolds Road, Cantonment, Trichinopoly.

DEVADHAR, GOPAL KRISHNA (Kaisar-i-Hind Gold Medal in 1920), Vice-President, Servants of India Society. *b.* 1871. *m.* Dwarkabai Sohani of Poona. *Educ:* New English School, Poona, and Wilson College, Bombay. M. A., Bombay University, 1904. Served as Principal of the Aryan Education Society's High School in Bombay, was Examiner of the Bombay University for Matriculation and M.A. examinations in Marathi for more than five years. Joined the late G. K. Gokhale in his public work, 1904, and was first member to join Servants of India Society, 1905, awarded Kaisar-i-Hind Silver Medal in 1914. Worked as Vice-President of the Servants of India Society for 3 years since 1923 and is again re-elected Vice-President of the Society for 3 years more. He has been ever since its beginning the Head of Bombay Branch. Toured in England and on the Continent in 1918 as member of Indian Press Delegation. He is the founder and Hon. Organiser and General Secretary of the Poona Seva Sadan Society, started in 1909, and now Hon. General Secretary of the National Social Conference. Presided over the Provincial Social Conference in 1920 at Sholapur and over the National Social Conference in 1924 at Lucknow. Organiser of the Malabar Relief Fund, 1921; and South Indian and Malabar Flood Relief Fund in 1924; Organised a Fund on behalf of the Servants of India Society for the relief of the flood-stricken in Gujarat, Kathiawar, Baroda, Sind and Orissa in 1927, served as member of Committee on Co-operation appointed by Mysore Government and the Government of Madras. Gave evidence before the Royal Commission on Agriculture as President of the Provincial Co-operative Institute, Bombay; has worked on several Committees appointed by Government. Now the elected President of the Bombay Central Co-operative Institute of which for more than five years he had been Vice-President; Director, Bombay Central Co-operative Bank. Has published several pamphlets on Co-operation, Female Education and Social Reform. In January 1927 he received the distinction of C. I. E. and in June 1927 was unanimously elected as President of the Servants of India Society, Poona. *Address*: Girgaum, Bombay.

DEVERELL, LIEUT-GENERAL SIR CYRIL JOHN, K.B.E. (1926); C.B. (1918). Quarter-Master General (India), since Feb. 1927. *b.* 9 Nov 1874. *s.* of late Major J. B. S. Deverell *m.* 1902, Hilda, *d.* of Col. G. Grant-Dalton. The P.W.O. West Yorkshire Regt. *Educ.*: Bedford School. 2nd Lieut., The P.W.O. West Yorkshire Regt., 1895; Adjutant, 1st West Yorkshire Regt., 1903-6; passed Staff College, 1907; Brigade-Major, India, 1908-11; General Staff, India, 1913-14; Brigade-Major, B.E.F., 1914-15; commanded 4th East Yorkshire Regt., 1915; 20th Infantry Brigade, 7th Division, 1915-16; 3rd Division, Aug. 1916-April 1919; Officer of the Legion of Honour; Croix de guerre with Palm; Bt.-Major, 1915; Bt.-Lt.-Col., 1916; Bt.-Colonel, 1917; Promoted Major-General for distinguished service in the field, 1919; despatches 9 times; Welsh Division T. A., 1919-21: commanded United Provinces District, India, 1921-25. Promoted to Lieut.-General, March, 1928. *Address*: Army Headquarters, Delhi and Simla.

DEY, GEORGE GOODAIR, C.I.E., (1928); Secretary and Chief Engineer, P.W.D., Bengal *b.* 13 September 1876. *m.* Ethel May Davey. *Educ*: Bedford School and Royal Indian Engineering College, Coopers Hill. Assistant Engineer, P.W.D. 1st Oct. 1899; Executive Engineer, July 1907; Superintending Engineer, July 1915; Chief Engineer and Secretary, April 1921. *Address*: Writers Buildings, Calcutta.

DHAU BAKHSHI RAGHUBIR SINGH, RAO BAHADUR (1912), C.I.E., (1925), C.S.I., Retired President and Finance Member of State Council, Bharatpur. *b.* 1863. *Educ:* privately. Sardar holding a hereditary jagir, Sardar's allowances etc. from the State. Entered Bharatpur State service at an early age; promoted a Member of the Council of "Panchayat" of Sardars in the time of His late Highness Maharaja Jaswant Singh Sahib Bahadur; subsequently appointed Dhau and Guardian to the Minor Maharaja. Was a member of Indian Students' Advisory Committee for Rajputana and Ajmer Merwara. *Address:* Bharatpur.

DHRANGADHRA, H. H. MAHARANA SHRI SIR GHANSHYAMSINHJI, G.C.I.E., K.C.S.I., MAHARAJA RAJ SAHEB. *b.* 1889; *Suc.* father 1911. *Educ.:* in England with private tutors under guardianship of Sir Charles Ollivant. *Address*: Dhrangadhra, Kathiawar.

DHURANDHAR, RAO BAHADUR MAHADEV VISHWANATH, A.M., Visitor Professor of Painting, Sir J. J. School of Art. Bombay. *b.* 4th March 1871. *m.* Gangubai, 4th daughter of Madhavrao T. Rao. *Educ.* Rajaram High School, Kolhapur, and at the Sir J. J. School of Art, Bombay. Appointed as a painting master on the staff of the School of Art, then as Head Master in 1909 to 1918. Acted as Inspector of Drawing and Craft Work, Bombay Presidency, in 1918 and 1919 and again in 1920 and in 1923. Retired as Personal Assistant to the Principal, Sir J. J. School of Art, Bombay, in March 1928 and was re-appointed as Visiting Professor of Painting; was selected to decorate the Hon. Law Member's room, 'Secretariat, New Delhi; Vice-President, Art Society of India, Bombay. *Publications:* Illustrated C. A. Kincaid's (I.C.S.), (1) "Deccan Nursery Tales" (2)

"Stories of King Vikram." S. M. Edwards' (I.C.S.) "By-ways of Bombay." Otto Rothfeld's (I.C.S.) "Women of India" and several other Marathi, Gujarathi, Hindi and Mythological books for Messrs. Macmillan & Co., Oxford University Press, Longmans Green & Co., and several other Indian publishing firms. *Address:* "Shree Amba Sadan," Prabhu Nagar, Khar, Bombay No. 21.

DICK, George Paris, C.I.E., 1916, Bar-at-Law; Member of C. P. Legislative Council, 1921, and of each preceding Council; Govt. Advocate, C.P. *b.* 1866. *m.* Effie Geraldine Newman. *Educ.:* Dulwich College; called to Bar, Middle Temple, 1889; Advocate of Calcutta High Court, 1893; of the Judicial Commissioner Court, Nagpur, 1891; Lecturer in Law to the Morris College, Nagpur. President, New English High School and President, Nagpur Civil Station Municipal Council. *Publication:* Fitch and His Fortunes. *Address:* Nagpur. C. P.

DINAJPUR, Lieutenant Maharaja Jagadish Nath Ray Bahadur. *b.* 1894. *s.* by adoption to Maharaja Sir Girija Nath Ray Bahadur, K.C.I.E. *m.* 1916. *Educ.:* Presidency College, Calcutta. President, Dinajpur Landholders' Association; Member, Dis. Board, Dinajpur and Chairman, District Board, Dinajpur, and Member, British Indian Association, Bengal Landholders Assocn., Asiatic Society of Bengal, East India Assocn., London, Calcutta Literary Society, North Bengal Zamindars' Assocn., Rangiya Sahitya Parishat. Received King's Commission in Jan. 1924. *Address:* Dinajpur Rajbati, Dinajpur, 3 Middleton Row, Calcutta.

DONALD, Douglas, C.S.I. (1921); C.I.E. Commandant, B. M. Police and Samana Rifles *l.* 1865; *Educ.:* Bishop Cotton School, Simla, Joined the Punjab Police Force at Amballa, 1888; transferred to Peshawar, 1889; appointed C.B.M. Police, Kohat, 1890; served Miranzai Expeditions, 1891, on Samana posts and Tirah, re-transferred to Kohat, 1899; on special duty to raise Samana Rifles. *Address:* Military Police, Kohat.

DORNAKAL, Bishop of, since 1912; **Rt. Rev. Vedanayakam Samuel Azariah**, 1st Indian bishop, Hon. LL.D. (Cantab.); *b.* 17 Aug. 1874. *Educ.:* C. M. S. High School, Mengnanapuram; C. M. S. College, Tinnevelly; Madras Christian College. One of founders of Indian Missionary Society of Tinnevelly, 1903; Hon Secretary, 1903-9; Hon. Gen. Secretary of National Missionary Society of India, 1906-9; visited Japan as Delegate of World Student Christian Federation, 1907, and its Vice-President, 1909-11; visited England as Delegate to World's Missionary Conference, 1910; Head of Dornakal Mission, 1909-12. *Publications*: Holy Baptism, Confirmation, First Corinthians, etc. *Address:* Dornakal Singareni Collieries, Deccan.

DUFF, Reginald James, J.P., Hon. Presidency Magistrate; General Manager, New India Assurance Company, Ltd., Bombay. *b.* 11 July 1886. *m.* Olive A. Lockie. *Educ:* Whitgift Grammar School. North British and Mercantile Insurance Co., Ltd., London and Bombay. *Address:* Royal Bombay Yacht Club, Bombay.

DUGGAN, Jamshedji Nusserwanji, D.O. (Oxon), F.C.P.S., Major, I.M.S. (Hon.), L.M. & S., J.P., Ophthalmic Surgeon in charge, Sir C. J. Ophthalmic Hospital and Professor of Ophthalmology, Grant Medical College, Bombay. *b.* 8 April 1884. *m.* Miss Parakh. *Educ:* Bombay, Oxford, Vienna and London. Was Tutor in Ophthalmology, Grant Medical College, Consulting Ophthalmic Surgeon to War Hospitals and Ophthalmic Surgeon Parsi General Hospital, Bombay: is Private Ophthalmic Practitioner. Fellow of the Bombay University and Honorary Presidency Magistrate, Bombay. *Publications:* Papers on Spring Catarrh, Anterior Keratitis, Gonorrhœa and allied diseases of the eyes Artificial Eye, Traupical papilla, Squint cases and Sub-Conjuctival Injections in the eye. A familial group of the Selerotics; Deep infiltration Anoesthesia in Ophthalmic Operations. *Address:* Nepean Sea Road, Malabar Hill, Bombay.

DUHR, The Rev. Joseph, S.J., Ph.D., D.D., Principal, St. Xavier's College, Bombay. *b.* March 18, 1885. *Educ.*: the Gymnasium Echternach Grand Duchy of Luxemburg, St. Joseph's College, Turnhout, Belgium; Manresa House, Roehampton, London, St. Mary's Hall, Stonyhurst; Imperial College, South Kensington; St. Mary's Theological Seminary, Kurseong, India; Gregorian University, Rome; Campion Hall, Oxford; Professor at St. Xavier's College, Calcutta, 1910-1915; Professor at St. Xavier's College, Bombay, 1918-1921; Principal of St. Xavier's College, Bombay, from 1924. *Address.* St. Xavier's College, Cruickshank Road, Bombay.

DUNDAS, Robert Thomas, C.I.E.; Inspector-General of Police, Bihar and Orissa, since 1914; additional Member of Lieut.-Governor's Council. *b.* 1868, *e. s.* of the late Donald William Dundas. *Address:* Bihar.

DUNI CHAND, Lala, B.A., Licentiate in law, Honours in Persian and Literature, (1894), Member, Legislative Assembly, Vakalat and Public Work. *b.* 1873. *m.* Shrimati Bhagdevi. *Educ:* Forman Christian College and Oriental Coll., Lahore. Practised at the bar until 1921, Entered public life and took part in various activities of the Arya Samaj since 1899; was Manager of Anglo-Sanskrit High School, Amballa, from 1906-1921; Member, Managing Committee, D.A.V. College; resumed practice in 1923; presided over All-India Sud Conference in 1917; been a member, All-India Congress Committee, since 1920; was convicted and sentenced to six months' imprisonment in 1922 under Criminal Amendment Act; presided over Punjab Provincial Conference held in Rahtak in 1922; was Swarajist Member of the Second Legislative Assembly. *Address:* Kripa Nivas, Amballa.

DUNN, Cuthbert Lindsay, L.R.C.P. & S. (Edin.), D. P. H. (Lond.), C. I. E. (1928), Serbian Order of St. Sava, 4th Class (1920); Director of Public Health, United Provinces. *b.* 15th May 1875. *m.* to Janet Logan Dalgleish. *Educ.* Dollar Academy and Edinburgh University, South African War, February 1900 to August 1902. Entered I. M. S., 1st September 1902; Tibet Compaign, 1904;

Civil Employ, Punjab, 1905 to 1910 on plague duty. Deputy Sanitary Commissioner, U. P., 1910-1914; War services 1914 to 1919. Three times mentioned in despatches; Director of Public Health, U. P., 1919 to date. *Publications*: Indian Hygiene and Public Health "Dunn and Pandya" 1925. Various papers in scientific journals. *Address*: Lucknow.

DURBHANGA, MAHARAJADHIRAJ OF, SIR RAMESWARA SINGH BAHADUR, G.C.I.E., cr. 1915; K.C.I.E., cr. 1902; K.B.E., cr. 1918; 16 Jan. 1860; *s.* of Maharaja Maheshwar Singh Bahadur, twice married, two *s.* one *d.* Is head of the Maithil Brahmans in India. *Educ.*: Durbhanga, Muzaffarpore and Benares, and privately under the late Sir Chester Macnaghten, Principal, Rajkot College. Appointed Assistant Magistrate (Indian Statutory Civil Service), 1877; resigned, 1885, to manage his own extensive estates; received title, Raja Bahadur, 29 May 1886; was exempted from attendance in Civil Courts, under Government Notification, 14 May 1888; 1888-90, seat in Bengal Legislative Council as representative of Landowners of Bengal and Behar; succeeded to the gaddee of Raj Durbhanga on decease of his brother, 1898; received title Maharaja Bahadur, 1898; Member, Imperial Legislative Council; five times and six times President of British Indian Association; Life Pres., Behar Landholders' Association, and Life Pres., Bharat Dharma Mahamandal, by which he was elected to be the chief of the orthodox Hindus of India; made hereditary Maharaj Bahadur, 1907; hereditary Maharajadhiraj, 1920; has restored and constructed temples destroyed by the earthquake of 1902 in Kamakhya, Assam, Sylhut and other places; has constructed the Rajnagar Palace at a cost of £160,000; it is the finest example of oriental architecture in Bengal since the Mogul period; has constructed magnificent temples at Darbhanga, Patna, Rajnagar, Bhowara, Kamakhya, Lahore, etc.; possesses one of the best libraries in India; Kaisar-i-Hind Gold Medal, 1900; a Member of Indian Police Commission, and of Indian Famine Trust; Pres. of the Prince of Wales' Reception Committee for Bengal, 1905; Member, Executive Council, Bihar and Orissa, 1912-17; President, Hindu University Society, 1913; President, Indian Industrial Conference, 1908; President, Religious Convention (Parliament of Religions) held at Calcutta, 1910, and at Allahabad, 1911; President, All-India Hindu Conference, April 1915; President, Bengal Landholders' Association; Presented 5 aeroplanes during the war; Member, Council of State; D. Litt. (Benares Hindu University) 1922; Trustee to the All-India Victoria Memorial. Heir: *s.* Maharaja Kumar Kameshwara Singh, *b.* 28 Nov. 1907. Recreations: Chess. *Address*: Durbhanga, India; other Palaces at Rajnagar, Calcutta, Simla, Patna, Allahabad, Benares, Muzaffarpore, Purneah, Ranchi and Hardwar.

DUTT, AMAR NATH, B.A., B.L., M.L.A., *s.* of late Mr. Durga Dass Dutt and Srimati Jugal Mohini Dutt, Advocate, Calcutta Hgh Court. *b.* 19 May 1875. *m.* Srimati Tincari Ghosn, 1897, daughter, Sandhyatara, born 1902; son, Asok Nath, *b.* 1906. *Educ.*: Salkia A. S. School, Howrah, Ripon and Municipal Schools, Metropolitan Institution and Presidency Coll., Calcutta; was Chairman, Local Board; Member, District Board; Secretary, People's Association, District Association, Central Co-operative Bank, Ltd., Burdwan; elected Member, Court of the University of Delhi and Elected Member, Indian Legislative Assembly; was President, Bengal Postal Conference and All India Telegraph Union and was editor of monthly magazine *Alo*. *Address*: "Rurki Aloy," Keshabpur, Burdwan.

DYER, JAMES FERGUSON, M.A., C.I.E. (1929); I.C.S. Officiating Commissioner, Nagpur Division. Joined I.C.S., in 1902 and arrived in India in 1903; Asstt. Commissioner, Registrar in the Judicial Commissioner's Court and Settlement Officer from 1903 to 1915; 3rd Secretary to the Chief Commissioner, 1916; Deputy Commissioner, 1917; Commissioner of Settlement and Director of Land Records, C.P.; and Officiating Commissioner, 1926. *Address*: Nagpur, Central Provinces.

EASTLEY, CHARLES MORTIMER, Solicitor and Notary Public. *b.* 2 September 1890. *m.* Esme Beryl Chester Wintle. *Educ.*: Paignton Devon, England; La Villa, Ouchy, Lausanne, Switzerland, Dr. F. Schiller, Allee 5, Coburg, Germany. Served in the Great War from 1914-1919 as Lieut. R.F.A. (T.F.) in India; as an Observer and Pilot in R.F.C. and as a Pilot in the R.A.F. against the Mohmands on the N.W.F. in 1916; against the Marri in Baluchistan in 1917; against the Turks at Aden in 1918; against the Afghans in 1919. *Address*: C/o Little & Co., Solicitors and Notaries Public, Central Bank Building, Bombay.

EWBANK, ROBERT BENSON, B.A. (Oxon), C.I.E. (1924), I.C.S., Collector of Hyderabad *b.* 22 Oct. 1883. *m.* Frances Helen, *d.* of Rev. W. F. Simpson of Caldbeck, Cumberland. *Educ*: Queen's Coll., Oxford. Asst. Coll. and Asst. Pol. Agent, 1907; Registrar of Co-operative Societies, Bombay, 1912-20; Secretary to Imperial Committee on Co-operation, 1920-24 Deputy Secretary to Gov. of India successively in Commerce, Rev. and Agric., P. W. D. and Education, Health and Land Departments, 1924; Secretary, Colonies Committee, London, 1925. Officiated as Private Secretary to H. E. Lord Reading, Secretary, Back Bay Enquiry Committee, 1926. *Publications*: Bombay Co-operative Manual and Indian Co-operative Studies. *Address*: Hyderabad, Sind.

EWENS, STANLEY R. (Adopted Indian name, Jaya Veera) Lieut. Commissioner, Salvation Army, Territorial Commander for Eastern India and Burma. Headquarters, Calcutta. *b.* 15th Feb. 1867. *m.* Staff Captain Nellie Swinfen (1923). Became an officer of the S. A. in 1884 (out of Notting Hill, London) Has previously done S. A. service in South America, Ceylon and Great Britain and as under Foreign Secretary at the Army's International Headquarters and held important positions at the S. A. National Headquarters, London.

FARIDKOT, H. H. FARZAND-I-SAADAT NISHAN HAZRAT-KAISAR-I- HIND, BRAR BANS, RAJA HAR INDAR SINGH BAHADUR OF. *b.* 1915, *s.* in 1919 rules one of the Sikh States of the Punjab. *Address*: Faridkot, Punjab.

FARRAN, ARTHUR COURTNEY, M.A., B.A. (1911), F. R. Hist. Society, Professor of History, Deccan College, Poona. *b.* June, 15, 1890. *Educ*: Trinity Coll., Dublin, *Address*: Deccan College, Poona.

FATEH ALI-KHAN, HON. HAJEE, NAWAB KIZILBASH, C.I.E. *b.* 1862. *S.* to headship of Kizilbashes, 1896. Placed himself and his great clan at disposal of Government for Chitral campaign, and induced many of tribes across border to adopt attitude of pacific non-intervention. For this service, received 3,000 acres of land in Chenab Canal Colony for settlement of his followers; has served on Punjab Legislative Council; representative of Punjab at Famine Conference, 1897; Life President of Anjumani-Islamia, Lahore, and Imamia Association of Punjab; a Councillor of Aitchison Chiefs' College, Lahore; Fellow of Punjab University, Trustee of Aligarh College; *Heir*: *s.* Nisor Ali Khan. *Address*: Aitchison Chiefs' Coll., Lahore.

FAWCUS, GEORGE ERNEST, M.A. (Oxon), C.I.E. (1927), O.B.E. (1923), V. D. (1923), Director of Public Instruction, Bihar and Orissa. *b.* 12 March 1885. *m.* (1911) Christine, *d.* of Walter Dawes, J.P. of Rye, Sussex. *Educ.*: Winchester College and New College, Oxford. Joined the I.E.S. 1909; Director of Public Instruction, Bihar and Orissa, since 1917. *Address*: Patna, E.I.R.

FAZULBHOY CURRIMBHOY, SIR (1913) C.B.E. (1920); Merchant and Millowner. *b.* 4 Oct. 1872. *m.* Bai Sakinabai, *d.* of the late Mr. Datoobhoy Ebrahim. *Educ.*: privately. Municipal Corporator for over 21 years; Chairman, Standing Committee (1910-11); President, 1914-15; Represented Bombay Millowners' Association on Bombay Prov. Council, 1910-12 and Bombay Mahomedans on Imperial Legislative Council, 1913-16; represented Bombay Corpn. on Board of the Prince of Wales Museum of W. India; Hon Secretary, Bombay Presidency War Relief Fund. Appointed by Government Member of various Committees and Commissions, chief being the Weights and Measures Committee, Committee on the education of Factory Employes, and the Commission for Life Saving Appliances; invited by Government to be one of the three delegates from India to the International Financial Conference at Brussels, convened by the Council of the League of Nations, 1920. Connected with many of the principal industrial concerns in Bombay, and a Member of the Local Board of the Imperial Bank of India, Chairman, Indian Merchants' Chamber and Bureau, 1914-15. An active Member of the Committee of the Bombay Millowners' Association, being Chairman, 1907-8. Fellow of the Bombay University. A keen advocate of education, particularly of Mahomedans. Member of the Anjuman-i-Islam, Bombay, a Trustee of the Aligarh College, a Vice-President of the All-India Muslim League, a Member of the Committee of the Moslem University Foundation Association. Sheriff of Bombay, 1926. *Address*: Pedder Road, Cumballa Hill, Bombay.

FAZL-I-HUSAIN, THE HON. MIAN SIR, KT. (1925). K. C. I. E., B. A. (Punjab), M. A. Cantab.), Bar-at-Law (Gray's Inn); Revenue (Member, Punjab Government. *b.* 14 June 1877. *m.* eldest *d.* of Mian Nurahmad Khan. *Educ.*: Abbottabad, Govt. College, Lahore, Christ's College, Cambridge. Practised in Sialkot, 1901-5; in the Punjab High Court, Lahore, 1905-20; Presdt., High Court Bar Association, 1919-20; Professor and Principal, Islamia College, 1907-8; Secretary, Islamia College, 1906-18; Fellow, Punjab University, 1909-1920; Syndic. Punjab University, 1912-1921; represented Punjab University on Legislative Council, 1917-20; President. All-India Mahomedan Educational Confce., 1922; started Muslim League, 1905; Title of K.B. 1919; President, Punjab Prov. Conference, 1916; elected to Punjab Legislative Council, 1920. Apptd. Minister of Education, Punjab, 1921; re-elected unopposed to Punjab Legis. Council, 1923; re-appointed Minister of Education, Punjab, 1924. Temp. additional Member of Council, H. E. The Governor-General of India's Council, Aug. 1925. Re-appointed Minister of Education, Nov. 1925; Apptd. Revenue Member, Punjab, 1926. Leader of the House since July 1926; Member of the Indian Delegation to the League of Nations 1927. *Address*: 7 Lytton Road, Lahore.

FILOSE, LT.-COL. CLEMENT, M.V.O.; Military Sec. to Maharaja of Gwalior, since 1901; *b.* 1853. *Educ.*: Carmelite Monastery, Clondalkin; Carlow College. Entered Gwalior State service, 1872; Lt.-Col., 1903; Assistant Inspector-Gen., Gwalior Police and General Inspecting Officer, 1893-97; A.-D.-C. to the Maharaja Scindia, 1899-1901. *Address*: Gwalior.

FORSTER, MARTIN ONSLOW, Ph. D. (Wurzburg), D. Sc. (London), F. I. C., F. R. S. (1905); Director, Indian Institute of Science, Bangalore (1922). *b.* 1872. *Educ.*: Private schools; Finsbury Technical College, Wurzburg Univ.; Central Technical College, South Kensington. Asstt. Prof. of Chemistry, Royal College of Science, 1902-13; Director, Salters' Institute of Industrial Chemistry, 1918-22; Hon. Secretary, Chemical Society, 1904-10; Treasurer, 1915-22; Longstaff Medallist, 1915; President of Chemistry Section, British Association, 1921; President, Indian Science Congress, 1925. *Publications*: Contributions to Transactions of the Chemical Society, *Address*: Hebbal, Bangalore.

FOULQUIER, RT. REV. EUGENE CHARLES Vicar Apostolic of Northern Burma and Titular Bishop of Corydallus, since 1906. *b.* 1866. *Address*: Mandalay.

FREKE, CECIL GEORGE, B.A. (Cantab); B.Sc. (Lond.) F.S.S., I.C.S., Dy. Secretary, Govt. of Bombay, Finance Deptt. 1926, *b.* 8 October

1887. *m.* Judith Mary Marston. *Educ.*; Merchant Taylor's School, London. St. John's College, Cambridge. Entered I.C.S. 1912. Under-Secretary, Government of India, Commerce and Industries Department 1919; Director-General of Commercial Intelligence and Statistics, 1921-1926. *Address:* Secretariat, Bombay.

FREMANTLE, SIR SELWYN HOWE, KT. (1925); C.I.E. (1915); C.S.I. (1920) I.C.S., Senior Member, Board of Revenue, U.P. *b.* 11 Aug, 1869. *m.* to Vera. *d.* of H. Marsh, C.I.E. *Educ.* Eton and Magdalen College, Oxford. Entered I.C.S., 1890; Settlement Officer, Bareilly, 1898; Registrar, Co-operative Societies, 1907; Magte. and Collr. Allahabad. 1913; Commissioner, Bareilly, 1918; Controller of Passages, 1919; Commissioner, Meerut, 1919. Member, Board of Revenue, U.P., 1920. *Publications:* Rai Barelli Settlement Report 1896; Bareilly Settlement Report. 1902; Report on Supply of Labour to factories, 1905; A Policy of Rural Education, 1915. *Address*: Lucknow, U. P.

FROOM, SIR ARTHUR HENRY, Kt. cr. 1922; Member of the Council of State, India, since 1921; *s.* of late Henry Froom. *b.* 1 Jan. 1873. *m.* 1st 1905, Effie (*d.* 1924) *y. d.* of late Thomas Bryant, F.R.C.S.; 2nd 1925, Isabel Patricia, *d.* of R. Manners Downie, Kuntsford. *Educ*: St. Paul's School. Entered service of P. & O.S.N.Co., 1890; Superintendent, P. & O. S. N. Co., Bombay, 1912-16; Partner, MackinnonMackenzie & Co., Bombay, since 1916; Trustee, Port of Bombay, 1912-24; Chairman, Bombay Chamber of Commerce, 1920; Member, Imperial Legislative Council, 1921; Member, Indian Mercantile Marine Committee, India, 1923-24; Member, Reforms Enquiry Committee, India, 1924; Member, Central Advisory Council, Railways, India; J.P. Bombay. *Address*: Mont Blanc, Dadysett Hill, Bombay.

FYSON, PHILIP FURLEY, M.A. (Cantab) F. L. S., Principal, Pres. Coll., Madras. *b.* 1877, *m.* Diana Ruth Wilson, 1914. *Educ:* Loretto School; Sidney Sussex College, Cambridge (Scholar) Professor of Botany, Presidency, College, Madras, 1914-1921. *Publications:* "Flora of the Nilgiri and Pulney Hill-tops," "Botany for India,"; *Address:* Presidency College, House Madras.

FYZEE RAHAMIN, S., Artist. *b.* 19 Dec. 1880 *m.* Atiya Begum H. Fyzee, sister of Her Highness Nazli Rafiya Begum of Janjira. *Educ*: School of the Royal Academy of Arts, London and privately with John Sargent, R.A., and Sir Solomon J. Solomon, R.A., London. Exhibitor at the Royal Academy Annual Exhibitions; privately at the Gallery George Petit in Paris, Goupils' and Arthur Tooth's in London, Knoedlers', Andersons' New York and at the Palace of Fine Arts in San France Co, U. S. America. In 19125 this National Gallery of British Art acquired two paintings for their permanent collection, now hung in the Tate Gallery, Milbank. In 1926 and 1927, painted the first dome in the Imperial Secretariat in New Delhi. for Several years Art Adviser to H. H. the Gaekwar of Baroda. The existence of the Baroda Art Gallery and its collection was made at his suggestion and mainly under his supervision. *Publications.* History of the Bene-Israelites of India. *Address:* "Aiwan-e-Rif'at, Ridge Road, Malabar Hill, Bombay.

GAGE, ANDREW THOMAS, C.I.E., M.A., B.Sc., M.B., F.L.S.; Lt.-Col., I.M.S.; Director, Botanical Survey of India; Supdt., Royal Botanic Gardens, Calcutta, since 1906. *b.* 1871; *Educ.:* Grammar School, Old Aberdeen; University of Aberdeen; Assistant to Professor of Botany, University of Aberdeen, 1894-96; entered I.M.S., 1897; Curator of Herbarium, Calcutta Botanic Gardens, 1898. *Address:* Royal Botanic Gardens, Calcutta.

GAJENDRAGADKAR, ASHVATTHAMA BALACHARYA, M.A., Ph. D., M.R.A.S.. Professor of Sanskrit, Elphinstone College, Bombay. *b.* 1 Oct. 1892. *m.* Miss Kamalabai Shaligram of Satara. *Educ:* Satara High School, Satara and the Deccan College, Poona. Stood First in the First Class in B.A., and carried off many prizes and scholarships during the College and University Carreer. Appointed Assistant to Professor of Sanskrit at Elphinstone Coll. Septr. 1915; Lecturer on Sanskrit at Karnatak College, Dharwar, 1917; apptd. Prof. of Sanskrit, Elphinstone College in 1920. *Publications:* Critical editions of many Sanskrit classics for the use of University students which include Kalidasa's Ritusamhara; Kalidasa's Shakuntala; Bana's Harsacharita; Dandin's Dashakumara Charita; Bhatta Narayana's Venisamhara, etc. *Address:* Maharaja Building, Bombay 4.

GAJJAN SINGH, SARDAR BAHADUR, O.B.E., Member, Legislative Assembly (1920). *b.* January 1864. *Educ.:* Ludhiana and Lahore; Practised at the bar from 1884 to 1920; was leader of Ludhiana District Bar; President, Managing Committee Malwa Khalsa High School, Ludhiana, Senior. Vice-President, District Board, Ludhiana, Vice-Presidents Central Co-operative Bank, Ludhiana, Magte. 1st Class and Member, Punjab Legislative Council from 1913-20. and District Board, Jagir and Landholder; an Hon. Extra Asstt. Commissioner, awarded Sword of Honour and seat in Durbar for war services; mentioned in despatches, Author of the Punjab Juvenile Smoking Bill, which was passed. *Address:* Ludhiana.

GANDHI, MANMOHAN PURUSHOTTAM, M.A., Secretary, Indian Chamber of Commerce, Calcutta; India; Secy., Indian Port Trustee's Association, Calcutta; Secy., Indian Steel Agents' Association, Calcutta, Registrar, Indian Chamber of Commerce Tribunal of Arbitration, Calcutta; Secy., Board of Control to the East India Jute Association, Calcutta; *s.* of late Purushottam Kahanji Gandhi, of Limbdi, (Kathiawar); *b.* 5th November 1901. *m.* 1926, Rambhagauri, *d.* of Sukhlal Chhaganlal Shah of Wadhwan. Joined Government of Bombay, Labour Office, as Statistical Asstt. 1926; Indian Currency League, Bombay, as Asstt. Secretary, 1926, Indian Chamber of Commerce, Calcutta, 1926, *Publications:* A Mercantile Marine for India—a paper read before the Indian Economic Conference, 1925, Foreign capital in India—a joint paper read

before the Indian Economic Conference 1926; Modern Economics of Indian Taxation—being the Sir Manubhai Mehta Prize Essay. 1924. The Indian Cotton Textile Industry from the earliest times to the present day—being the Bombay University Ashburner Prize Essay. 1925. *Address:* c/o Indian Chamber of Commerce, 135, Canning Street, Calcutta, India.

GANDHI, MOHANDAS KARAMCHAND, Bar.-at-law (Inner Temple). *b.* 2nd October 1869. *Educ.* at Rajkote, Bhavnagar, and London. Practised law in Bombay, Kathiawar, and South Africa. Was in charge of an Indian ambulance corps during the Boer War and the Zulu revolt in Natal. During the great war raised an ambulance corps and conducted a recruiting campaign in Kaira district. Started and led the Satyagraha movement (1918-19) and the non-co-operation campaign (1920) in addition to associating himself with the Khilafat agitation (1919-21). Has championed the cause of Indians abroad, notably those in South and East Africa. Sentenced to six years' simple imprisonment in March 1922; released Feb. 4, 1924. President of the Indian National Congress, 1925. *Publications:* "Indian Home Rule," "Universal Dawn," "Young India." *Address:* Satyagrahashram, Sabarmati, B. B. & C. I. Railway.

GANDHI, NAGARDAS PURSHOTTAM, M.A., B,Sc., University Professor and Head of Department of Mining and Metallurgy, Benares Hindu University, Benares, India; *s.* of late Purshottam Kahanji Gandhi of Limbdi, (Kathiawar); *b.* 22nd December 1886; *m.* 1906, Shivkunvar *d.* of Sheth Bhudar Lalchand, Ranpur; *Educ:* Bahauddin College, Junagad, Wilson College, Bombay. Joined Messrs. Jamal Bros., as Mining Engineer in Burma in 1914; joined Tata Iron & Steel Co., 1916; was appointed General Manager of Messrs. Tata Sons, Ltd., in Tavoy (Lower Burma), where Wolfram Mining was carried on during the Great War; joined Benares Hindu University as Uinversity Professor of Geology, Mining and Metallurgy in 1919. *Address:* Benares Hindu University, Benares, India.

GANGULI, SUPRAKASH, nephew of the poet, Dr. Rabindranath Tagore; Artist M.R.A.S. (Lond.) Curator, Museum and Art Gallery, Baroda. *b.* 8th May 1886. *m.* Srimati Tanujabala Devi, grand-daughter of the late C. K. Tagore. *Education.:* Doveton College, Calcutta, subsequently visited Europe chiefly for the study of Fine Arts and Archæology. With the idea of gaining a wider knowledge in the above subjects he held a temporary post in the Imperial Archæological Survey under late Dr. B. B. Spooner, Dy. Director-General of Archæology in India. Here he spent about 6 years doing the work of photographing and listing of the Ancient Monuments in the Provinces of Bengal, Behar and Orissa, Assam and Chota Nagpur and of studying ancient Indian Sculptures in the Indian Museum, Calcutta, and branches. *Publications:* Under preparation 1. A monograph on Rags and Raginis with 36 colour reproductions of old paintings. 2. A monograph on Rajput and Kangra Paintings with 12 illustrations. 3. Influence of Japanese Art on the Modern Bengal School. 4. A short history on the art of brocade weaving in Gujarat. 5. Moghul textiles. 6. Lacquer-work in India. *Address:* Pushpabag, Baroda.

GEDDIS, ANDREW, J. P., JAMES FINLAY & Co., Limited. *b.* 11th July 1886. *m.* Jean Baikie Gunn, *d.* of Dr. Gunn, George Square, Edinburgh. *Educ:* George Watson's College, Edinburgh. Joined James Finlay & Co., Ltd., Bombay, 1907; Chairman, The Finlay Mills, Ltd., Swan Mills, Ltd., Gold Mohur Mills Ltd., Director, Bank of India, Chairman, Bombay Millowners' Association, 1926; Millowners' Association's representative on Port Trust. *Address:* Sudama Villa, Nepean Sea Road, Malabar Hill.

GENNINGS, JOHN FREDERICK, Bar-at-Law (Middle Temple, 1911); Director of Information and Labour Intelligence, Bombay, and Acting Commissioner of Workmen's Compensation. *b.* 21 Sept., 1885. *m.* Edith *d.* of T. J. Waills, Esq., of Croydon, Surrey, and Aldeburgh, Suffolk, *Educ:* Aske'y Hatcham and Dulwich. Entered journalism in 1902 and served on the Editorial Staffs of the Morning Leader, Star, Daily Mail and Daily Telegraph. Army (2/5th Buffs. and R. G. A.), 1915-1919; War Office. M. I. 7 b, Propaganda Section, from Aug. 1916 to Feb. 1917. Director of Information, Dec. 1920; Ag. Director of the Labour Office in addition, July 1925 to March 1926, Since that date in charge of combined offices as Director of Information and Labour Intelligence. *Address:* Secretariat, Bombay.

GHOSAL, MRS. (SRIMATI SVARNA KUMARI DEVI); *d.* of Maharshi Debendra Nath Tagore and sister of Sir Rabindranath Tagore. *b.* 1857. *m.* late J. Ghosal, Zemindar. Before twenty published a novel anonymously; soon after became editor of "Bharti" (first woman editor in India), a Bengali magazine which she still conducts. *Address:* Old Ballygunge Road, Calcutta.

GHOSE, THE HON. MR. JUSTICE CHARU CHUNDER, Judge, Calcutta High Court, since July, 1919. *b.* 4 February 1874. *Educ.:* Presidency College, Calcutta. *m.* Nirmal Nolini, *d.* of the late Protap Chunder Bose, Vakil, Calcutta, 1898. Called to the Bar in England, 1907. *Address:* High Court, Calcutta.

GHOSH, RAI BAHADUR DEVENDRA NATH, B.A. (Honours); Beereswar Mitter Gold Medallist of Calcutta Univ. (1911). *b.* December 18, 1868. *m.* Miss Sushila Kumari, *d.* of late Mr. G. C. Ray, Dy. Auditor-General, Finance Dept. *Educ:* Hindu School, General Assembly's Institution and Presidency College, Calcutta. Joined Finance Department, Government of India, March 1891. Elected Fellow of the Royal Statistical Society, London, 1909, of the Royal Economic Society, London, 1911, and Member of the Board of Agriculture in India, 1921, of the Indian Economic Association, 1921, and of the Bengal Economic Society,

1925. *Publications:* Various departmental publications relating to Sea-borne, Inland and Land Frontier Trade, Agricultural, Financial, Judicial. Administrative, Industrial and Prices Statistics. Director of Statistics with Government of India, 1921; Deputy Director of Commercial Intelligence, 1923; retired in June 1926. Statistician to the Royal Commission on agriculture, Octo. 1926. *Address:* 26, Nyan Chand Dutt Street, Calcutta.

GHUZNAVI, THE HON. HADJI SIR ABDUL KARIM ABU AHMED KHAN, KT., (1928), M.L.C., Zemindar and Land-owner; Minister, Government of Bengal. *b.* 25 August 1872. *Educ:* St. Peters School, Exmouth, Devonshire. Messrs. Wren and Gurney's Institution, London. Universities of Oxford and Jena (Germany), At an early age sent to a public school in England; appeared at the I. C. S. examination in 1890, after which finished his career in the Universities of Oxford and Jena. Travelled almost all over the continent of Europe, where a number of years were spent for Education purposes in Germany, France & Italy. Returned to India 1894 and settled on his estates handed down by his ancestors Fatchdad Khan Ghuznin Lohani, brother of Oramn Khan Ghuznin Lohani, the last independent Afghan Chieftain of Bengal Represented the whole of E. B. & Assam in both Moslem & Hindu interests in the old Imperial Legislative Council (1909-12). Represented the whole of Bengal in Moslem interests in Viceroy's Council (1913-16). Was sent on a political mission to the Court of ex-King Hussein of Hedjaz as well as to Palestine and Syria to enquire into the question of Pilgrim Traffic (1913). Appointed Minister, Government of Bengal, on 1st January 1924. Again appointed Minister, Government of Bengal, on 26th January 1927. Created Knight Bachelor 1928. *Address:* North House, Dilduar, Mymensingh; Writer's Building, Calcutta.

GIDHOUR, MAHARAJA BAHADUR CHANDRA MOULESHWAR PRASAD SINGH, MAHARAJA BAHADUR OF GIDHOUR. *b.* 1890. *m.* 1913. Has been a Member of District Board, Monghyr; Vice-Chairman, Local Board and an Honorary Magistrate with independent powers (to try cases singly). Member of Legislative Council, Bihar and Orissa, since 1920. Ascended the Gadi on 21st November 1923. Title of Maharaja Bahadur made hereditary in 1877. has a Son and heir-Maharaj Kumar Chandra Choor Singh. *Address:* Srivilas, Gidhour. District Monhgyr.

GIDNEY, HENRY ALBERT JOHN, LT.-COL., I.M.S. (retired); F.R.C.S.; F.R.S.; D.O. (Oxon.); F.R.S.A. (London); D.P.H. (Cantab) J.P.,M.L.A.Ophthalmic Surgeon.*b.*9 June 1873. *Educ.:* at Calcutta, Edinburgh R. College, University College Hospital, London, Cambridge and Oxford. Post Graduate Lecturer, in Ophthalmology, Oxford University (1911). Entered I.M.S., 1898. Served in China Expedition, 1900-01, N. E. Frontier, 1913, N. W. Frontier, 1914-15 (wounded). *Publications;* Numerous works on Ophthalmic Surgery. President-in-Chief, Anglo-Indian and Domiciled European Association, India; President, Ango-Indian and Domiciled European Association (Bengal); Leader of 1925 Anglo-Indian Deputation to England; Accredited leader of the Domiciled Community in India and Burma; Member of Legislative Assembly. *Address:* 28, Theatre Road, Calcutta.

GILBERT-LODGE, CAPTAIN EDWARD MORTON, F.S.I., F.I.A., F.A.I., J.P. *b.* 23 Jan. 1880. *m.* May *d.* of Thomas Spencer, Esq. of Norwood, London, S. E. *Educ:* at Sydney, N. S. Wales, Australia. Private practice, London, 1903-1914; Royal Engineer, April 1915—May 1920, then retiring to Reserve with rank of Captain; Asst. Land Acquisition Officer, Bombay, May-Nov. 1920; Land Manager, Development Directorate, Nov. 1920 to Dec. 1925. *Address:* Churchgate Street.

GILROY, MAJOR PAUL KNIGHTON, M. C. (1917) M. D., F.R.C.S., I.M.S., Superintendent, St George's Hospital, Bombay. *b.* June 7, 1885 *m.* Miss W. H. Walker. *Educ:* Cambridge (Selwyn Coll.) and St. George's Hospital Hyde Park. Entered I.M.S., Jan. 29, 1910. *Address:* 10 Rocky Hill Flats, Lands End Road, Malabar Hill, Bombay.

GINWALA, SIR PADAMJI PESTONJI, KT. (1927), B. A. (His Tripos, Cambridge), Barrister at Law; President, Indian Tariff Board. *b.* Nov. 1875. *m.* Frenny Bezonji. *Educ.:* Govt. High School and Gujarat College, Ahmedabad, Trinity College, Cambridge, Called to the Bar 1899; Advocate, Chief Court; of Lower Burma, 1905; Asst. Govt. Advocate 1915; Secry., Legis. Council, Burma, 1916; resigned 1920; President, Rangoon Municipal Corporation 1922-23; Member Legis. Assembly, 1921-23; Member, Indian Tariff Board, 1923; President, 1926. *Address:* Department of Commerce, Government of India.

GLANCY, BERTRAND JAMES, C.I.E. (1924). Foreign and Political Department, Government of India. *b.* 31st December 1882. *m.* 1914, Grace Steele. *Educ.:* Clifton; Monmouth; Exeter College. Oxford, Indian Civil Service. *Address:* Delhi and Simla.

GLANCY, SIR REGINALD ISIDORE ROBERT, C.S.I. (1921), C.I.E., Agent to the Governor-General, Central India (1924). *b.* 1874; *m.* Helen Adelaide, *d.* of Edward Miles. Bowen House. *Educ.:* Clifton College; Christ Church, Oxford. Entered I.C.S., 1896; Settlement Officer, Bannu, 1903, Political Agent, 1907; First Asstt. Resident, Hyderabad, 1909; Finance Member of Council, H. E. H. the Nizam's Government, 1911-1921; Resident in Baroda, 1922; President of the Cabinet, Jaipur, 1923. *Address:* Indore.

GLASCOTT, JOHN RICHARD DONOVAN, C.I.E. (1926), Agent Burma Railways *b.* 10 June 1877. *m.* Verner O'Reilly Blackwood. *Educ.:* Bedford and Dublin Price Wills and Reeves, Railway and Port Contractors, 1898-1901; B. N. Rly., 1901-1903; Burma Railways, 1903 to date; prior to being Agent was Chief Engineer, 1918 to March 1920. *Address:* 2 C, Fytche Road, Rangoon.

GOLDSMITH, REV. MALCOLM GEORGE, Missionary of C.M.S. in Madras and Hyderabad, Deccan. *b.* 1849. *Educ.:* Kensington Proprietary Grammar School; St. Catherine's College, Cambridge. Ordained, 1872; C.M.S. Missionary, Madras, 1872-73; Calcutta, 1874-75; Principal, Harris School, Madras, 1883-91; Hyderabad, 1891-09; Hon. Canon, St. George's Cathedral, Madras, 1905. *Address:* Royapet House, Royapettah, Madras.

GONDAL, His HIGHNESS MAHARAJA THAKORE SAHIB SEHRI BHAGWAT SINHJEE OF, G.C.I.E., K.C.I.E., *b.* 1865. *s.* of late Thakore Saheb Sargramji of Gondal, *m.* 1881, Nandkuverba, C. I., *d.* of H. H. Maharana of Dharampore, *Educ.:* Rajkumar Coll., Rajkot: Edin. Univ. Hon. LL. D. (Edin.) 1887: M. B., and C. M. (Edin.) 1892: M.R.C.P., (Edin.) 1892; D.C.L. (Oxon.) 1892; M. D. (Edin.) 1895; F.R.C.P., (Edin.) 1895; F.C.P. and S. B. 1913; Fellow of University of Bombay 1885; F.R.S.E. 1909; M.R.A.S., M.R.I. (Great Britain and Ireland). H.P.A.C. *Publication:* Journal of a Visit to England; A Short History of Aryan Medical Science. *Address:* Gondal, Kathiawar.

GODWIN, CHARLES ALEXANDER CAMPBELL, MAJOR-GENERAL, C.B., (1924), C.M.G. (1918). D.S.O., (1917); G.O.C. Peshawar Dist, *b.* 1873. *m.* Catherine, *d.* of Colonel, V. Milward, M.P., for Worcester. *Educ:* at Westward Ho and Sandhurst. Joined Suffolk Regt. on unattached list in 1895; 1st Madras Lancers, 1896; transferred 3rd Punjab Cavalry, 1898; Waziristan Militia and Operations in Waziristan, 1900; Staff College, 1908-09; Bde. Major, Meerut Cavalry Brigade; S.S.O. 2 Mhow, 1914; Great War, France, 1914-17; Palestine, 1917-19; War Office, 1920; late A.D.C. to the King: Order of the Nile (3rd Class) 1918; Order El Nahda (2nd Class), 1918; French War Cross (1919); Commanded Secunderabad Cavalry Brigade, 1921-23 M. G. Cavalry, 1923-26. Commandant staff College, Quetta, 1926-27. *Address:* Flagstaff House, Peshawar.

GOODE, WALTER SAMUEL, C.I.E., I.C.S., B.A. (Hon.) Adelaide University 1898, B.A. (Hon.), Cambridge 1901. *b.* 25 Nov. 1878. *m.* Jean Reed Beatson Bell (deceased). *Educ:* Way College, Adelaide. I.C.S. General line, Deputy Chairman, Calcutta Corporation. Officiating Chairman, Calcutta Corporation; Secretary, Local Self-Government Department of Bengal. Officiating Chairman, Calcutta Improvement Trust. *Publications:* Municipal, Calcutta. *Address:* Magistrate's House, Alipore, Calcutta.

GOSCHEN, HIS EXCELLENCY VISCOUNT GEORGE JOACHIM OF HAWKHURST, G.C.I.E. (1924), C.B.E (1918), V. D., Governor of Madras. *b.* 1866, *e. s.* of 1st Viscount Goschen and Lucy. *d.* of John Dailley; *S.* father 1907. *m.* 1893. Lady Evelyn Gathorne-Hardy, 5th *d.* of 1st Earl of Cranbrook; two *d. Educ.:* Rugby; Balliol Coll, Oxford. Was Private Secretary to Governor of N. S. Wales, and (unpaid) to his father at Admiralty; Joint Parliamentary Secretary, Board of Agriculture, 1918; M. P. (C.) E. Grindstead, Sussex, 1895-1906 A. D. C. to Lord Roberts, Commander-in-Chief; Hon. Col. and Lt.-Col.. 2-5th Buffs East Kent Regt. A Knight of Grace of the Order of St. John of Jerusalem. Heir: *b.* Hon. Sir W. H. Goschen, K. B. E. *Address:* Government House, Madras.

GOSWAMI, KUMAR TULSI CHANDRA, M.A. (Oxon.), Zemindar, Member, Legislative Assembly. Son of Raja Kisorilal Goswami of Serampore, member of first Bengal Executive Council. *b.* 1898. *Educ:* Presidency College, Calcutta, Oxford and Paris. Delegate elected by the Indian Legislative Assembly to represent India at the August Session (1928) of the Empire Parliamentary Association, Canada. *Address:* The Raj Baree, Serampore; Rainey Park, Ballygunge, Calcutta; Kamachha, Benares; Puri.

GOUR, SIR HARI SINGH, KT. (1925), M.A., D. Litt., D.C.L., LL.D., Member of the Legislative Assembly. Barister-at-Law. *b.* 26 Nov. 1872. *Educ.:* Govt. High School, Saugor; Hislop Coll., Nagpur; Downing Coll., Cambridge. Presdt., Municipal Committee, Nagpur, 1918-22; First Vice-Chancellor, and Hon. D. Litt., Delhi University; re-appointed 1st May 1924-1926. *Publications:* Law of transfer in British India, 3 vols. (5th Edition); Penal Law of British India. 2 vols. (4th Edition); Hindu Code, 3rd Edition). The Spirit of Buddhism; His only Love; Random Rhymes and other poems. *Address:* Nagpur, C. P.

GOWAN, HYDE CLARENDON, B.A. (OXON.); V.D., C. I.E., (1928); I.C.S., Chief Secretary to Government Central Provinces. *b.* 4 July 1878. *m.* Edna Gowan (nee Brown). 1905; *Educ*; at Elstree School, 1889-1892; Rugby School, 1892-1897; New College, Oxford, 1897-1901 Univ. Coll., London, 1901-02. Under Secretary to C. P. Govt., 1904-08; officiated as Under Secretary, Commerce and Industries Department, Government of India, July to Nov. 1908; Settlement Officer, Hoshangabad District, 1913-17; Financial Secretary to Govt., C. P., 1918-1921; Dy. Commissioner Nagpur, 1923-25; Financial Secretary to Govt., 1925-27; Chief Secretary, March 1927. *Address*: Nagpur.

GRAHAM, REV. JOHN ANDERSON, M.A. (Edin.). D.D. (Edin.), K.I.H. Gold Medal, C.I.E.: Missionary of Church of Scotland, at Kalimpong, Bengal, since 1889; Founder and Hon. Supdt. of St. Andrew's Colonial Homes. *b.* 1861. *Educ.:* Cardross Parish School; Glasgow High School; Edinburgh University. *m.* Kate McConachie (K.I.H. gold medal) who died 1919. Was in Home C.S. in Edinburgh, 1877-82; graduated, 1885; ordained, 1889. *Publications*: "On the threshold of three closed lands" and "The missionary expansion of the Reformed Churches." *Address*: Kalimpong, Bengal.

GRAHAM, LANCELOT, M.A. (Oxon.); Bar-at Law; C.I.E. (1924); I. C. S., Secretary Legislative Dept., Govt. of India (1924). *b* 18 April 1880, *m.* Olive Bertha Maurice *Educ*: St. Paul's School, London and Balliol Coll., Oxford. Entered Indian Civil Service 1904; Asstt. Collector, 1904; Asstt. Judge, 1908; Asstt. Legal Remembrancer, Bombay, 1911; Judicial Asstt., Kathiawar, 1913; Joint

Secretary, Legislative Department, Government of India, 1921. *Address*: Grindlay & Co., Bombay.

GRAHAME, WILLIAM FITZWILLIAM, I.C.S., Provincial Art Officer, Supdt. of Cottage Industries and Provincial Training Officer since 1925. *b.* 1871. *m.* 1905 Elizabeth Dunlop Dunning, niece of Governor Dunlop of Maine, U. S. A. *Educ.:* at Charterhouse and Trinity Hall, Cambridge. Supdt. and Pol. Officer, S. Shan States, Commissioner, Pegu Division in 1918 and again from Feb. 1919 to June 1920, 1922-25. *Address :* Pegu Club, Rangoon.

GRAY, ALEXANDER GEORGE, Manager, Bank of India, Ltd. *b.* 1884. *m.* to Dulcie Muriel Fanny Wild, 1922. *Educ.:* Macclesfield Grammar School. Parrs Bank, Ltd., Manchester and District; arrived India, 1905; entered service of the Bank of India, Ltd., 1908. *Address*: 14, Nepean Sea Road, Malabar Hill, Bombay.

GREAVES, HON. SIR WILLIAM EWART, KT. (1924); Judge of Calcutta High Court since 1914, and Vice-Chancellor, Calcutta University since 1924. *b.* 1869. *Educ.:* Harrow, Keble College, Oxford; Asst. Master at Evelyns, nr. Uxbridge, 1894-99; called to Bar, Lincoln's Inn, 1900. *Address*: High Court, Calcutta; 33, Marlborough Place, N. W.

GREEN, ALAN MICHAEL, M.A., (Oxon), I.C.S. Collector of Customs, Bombay. *b.* 11 April 1885. *m.* Joan, the only child of Mr. and Mrs. F. D. Elkin (1919). *Educ.:* St. Paul's School, London, Lincoln College, Oxford. Joined I.C.S. in 1909. *Address:* New Custom House, P. O. Box 453, Bombay.

GREGSON, LIEUT.-COLONEL EDWARD GELSON, C.M.G., 1917; C.I.E., Deputy Inspector-General of Police, Punjab. *b.* 1877. *Educ.* Portsmouth Grammar School. Asst. Blockade Officer, Waziristan, 1900; Poll. Officer, Mohmand Border, 1908; Commdt., Border Military Police, Peshawar, 1902-07; Per. Asst. to Inspr.-Gen. of Pol., N. W. F., 1907-9; on special duty Persian Gulf, 1909-12; Commissioner of Police, Mesopotamia.

GRIFFITH, FRANCIS CHARLES, C.S.I. (1923), O.B.E. (1919), King's Police Medal (1916); Insp.-Gen. of Police, Bombay Presy., 1921. *b.* 9 November 1878; *m.* Ivy Morna, daughter of George Jacob, I.C.S., *Educ.*: Blundell's School, Tiverton. Joined Indian Police, 1898; Commr. of Police, Bombay 1919-21. *Address*: Poona.

GULAB SINGH, REIS, SARDAR, M.L.A. Managing Director, Punjab Zamindars' Bank, Ltd., Lyallpur, and Landlord. *b.* March 1866 *m. d.* of Dr. Sardar Jawahir Singh Reis of Lyallpur. *Educ.:* Government Coll., Lahore. Headmaster, Govt. Sandeman High School, Quetta, for 10 years; Member, Lyallpur and Quetta Municipalities and Dist. Board, Lyallpur, and Pres. of several co-operative credit societies and associations and elected as member of Legislative Assembly. 1920, and re-elected in 1923 and re-elected in 1926 unopposed Member, Finance Committee, Government of India. Hon. Magte., Lyallpur, for 9 years. *Address :* Bhawana Bazar, Lyallpur Punjab.

GULAMJILANI, BIJLIKHAN, SARDAR, NAWAB OF WAI. First Class Sardar of the Deccan and a Treaty Chief. *b.* 28 July 1888. *m.* sister of H.H. The Nawab Saheb Bahadur of Jaora. *Educ.*: Rajkumar College, Rajkot. Served in the Imperial Cadet Corps for two years, 1906-08; was Additional Member, Bombay Legis. Council; and Member, Legislative Assembly, 1921-1923; was elected Vice-President, Bombay Presidency Muslim League and is permanent President of Satara District Anjuman Islam. *Address :* The Palace, Wai Dist. Satara.

GWALIOR, HIS HIGHNESS MAHARAJA GEORGE JIWAJI RAO SCINDIA BAHADUR. *b.* 26th June 1916. Succeeded to the *gadi* on 5th June 1925. *Address :* Jai Bilas Palace, Gwalior, and Madho Bilas Palace, Shivapuri, C. I.

HABIB-UL-LAH SAHIB BAHADUR, THE HON. KHAN BAHADAR SIR MUHAMMAD, KT. (1922). K.C.S.I. (1927), K.C.I.E. (1924), C.I.E. (1920). Member of the Viceroy's Council (1924). *b.* Sept. 22, 1869, *m.* Sadathun Nisa Begum. *Educ.:* Zilla High School, Saidapet. Joined the Bar in 1888; in 1897 was presented Certificate of Honour on the occasion of Golden Jubilee of the late Imperial Majesty Queen Victoria; from 1901 devoted whole time to local self-government and held the position of Chairman of Municipal Council, Pres., Taluk Board and Pres., Dist. Board; Khan Bahadur, 1905; Member, Legislative Council, 1909-12, appointed Temporary Member, Madras Executive Council, 1919; was Commissioner of Madras Corporation, 1920. Gave evidence before Royal Commn. on Decentralisation and also before Public Services Commn., served as a co-opted member on Reforms Committee, Member, Royal Commission on the Superior Civil Services in India, Nov. 1923-March 1924, Member of Council of the Governor of Madras, 1920-24, and Leader of the Indian Delegation to South Africa, 1926-27. *Address* : Delhi and Simla.

HADOW, SIR (FREDERICK) AUSTEN, KT. (1926), C.V.O. (1922). M. Inst. C.E., M. Inst. Trans., V. D., Member, Ry. Board. *b.* 5 Sep. 1873. *m.* Kate Louisa Margary. *Educ.*: Branksome House, Godalming, 1883-1887, Charterhouse, 1887-1892; R. I. E. College. Coopers Hill, 1892-95. Associate Coopers Hill, 1895; Appointed Asstt. Engineer, State Rlys., 1895; employed as Asstt. Engineer on construction of new railways in Bengal, 1896-1902; Asstt. Manager, E. B. Rly., 1902-1904; Asstt. Secretary, Railway Board, 1905-1909; Manager and Engineer-in-Chief, B. G. J. P. Rly., Kathiawar, 1909-1911; Deputy Agent, N. W. Rly., Lahore, 1911-1916; Secretary, Railway Board, 1916-1919; Agent, North-Western Railway, 1919-24. *Address :* Morvyn, Simla, W.

HAIDER KARRAR JAFRI, SYED., Member, Legis. Assembly and Astt. Manager, Court of Wards, Balrampur Raj. *b.* 8 Dec. 1879. Married. *Educ.:* Collegiate School, Balrampur, M.A.O. Coll., Aligarh, Agra College and Mistri's Accountancy Institution, Bombay; Member, Gonda Dist. Board for six years; Member, Municipal Board, Balrampur, for 20 years; Hon. Magte., Balrampur, for 14 years; Vice-Chairman, Balrampur Central

Co-operative Bank; Member, Standing Committee, All-India Shia Conference; Trustee, Shia Coll., Lucknow; President and Trustee of the Balrampur Girls' School. *Address*: Balrampur, Dist. Gonda (U.P.).

HAILEY, SIR WILLIAM MALCOLM, G.C.I.E., K.C.S.I., I.C.S., Governor of the United Provinces (1928,) Knight of Grace of Order of St. John of Jerusalem Hon. Fellow, Corpus Christi College, Oxford. *b.* 1872. *m* 1896, Andreina, *d.* of Count Hannibale Balzanis Italy. Lady of Grace of Order of St. John of Jerusalem; F.R.G.S. *Educ* : Merchant Taylor's School; Corpus Christi College, Oxford (Scholar). Colonisation Officer, Jhelum Canal Colony, 1902; Sec., Punjab Govt., 1907; Dy. Sec., Govt. of India, 1908: Member, Durbar Committee, 1911; Ch. Commr., Delhi, 1912-19; Chairman, Indian Soldiers' Board, 1921; Finance Member, Government of India, 1919-22. Home Member, Government of India, 1922-24, Governor of the Punjab 1924-28. *Address:* Lucknow, U. P.

HAJI WAJIHUDDIN, KHAN BAHADUR (1926). Proprietor of Pioneer Arms Co., Meerut, *b.* 1880. *Educ:* privately. During Great Balkan War (1910-12) was Treasurer, Meerut Division, Red Crescent Fund; during Great War (1918) worked as Hon. Secretary, Meerut Cantonment War Loan Committee. Member of many educational institutions. Elected in 1916 to Meerut Municipal Board; re-elected in 1919; elected in 1920 to Legislative Assembly, re-elected in 1932. Appointed in 1922 to bench of Hon. Magistrates; appointed 1927 Chairman, Cantonment Bench of Hon. Magisrates Section B.; elected in 1922, Hon. Secretary to the Central Haj Committee of India. *Publications* : "Prohibition in India," "Ziaratul Haramain-is-Shareefain." Elected unopposed in 1927 to Cantonment Board; re-elected unopposed in 1928 for three years; elected Vice-President of Prohibition League of India in 1926; re-elected in 1928 for two years; elected President of Meerut Cantonment Residents. Association in 1926. *Address:* "Pioneer House," Meerut Cantonment.

HAKSAR, COL. KAILAS NARAIN, B.A., C.I.E., Mahsir-Khas-Bahadur; Pol. Member, Gwalior Durbar, since 1912. *b.* 1878. *Educ.:* Victoria College, Gwalior; Allahabad University; Hon. Prof. of History and Philosophy, 1899-1902; Priv. Sec. to Maharaja Scindia in 1903-12; Under-Sec., Pol. Dept., on dep. 1905-7; Capt., 4th Gwalior Imp. Ser. Inf., 1902; Col., 1924. *Address:* Gwalior.

HALL, MAJOR RALPH ELLIS CARR, C.I.E., I.A, Mily. Accts. Dept., Field Controller, Poona, *b.* 1873. Joined army, 1894; Major, 1912, served Tirah, 1897-98; European War, 1914-17. *Address:* Field Controller, Poona.

HAMILL, HARRY, B.A., Principal, Elphinstone College. *b.* 3 Aug. 1891. *m.* Hilda Annie Shipp. *Educ.:* Royal Academical Institution Belfast, and Queen's University, Belfast. After graduation served in British and Indian Army. Appointed to the I.E.S., in 1919. *Address*: Elphinstone College, Bombay.

HAMILTON, C. J., M.A., F.S.S.; Indian Educational Service, Prof. of Economics, Patna College; Fellow of Patna University. *b.* 1878. *Educ.:* private tutor; King's College, London; Caius College, Cambridge; graduated first class Moral Science Tripos, 1901; Member of Mosely Educational Commission to U.S.A. 1903; Member of Inner Temple 1903; Dunkin Lecturer at Oxford University, 1912; Minto Prof. of Economics, Calcutta, University, 1913-19. *Publications:* "Trade Relation between England and India." *Address:* Patna College, Patna.

HAMLEY, HERBERT RUSSELL, M.A., M.Sc. Dip.Ed. (Melbourne). Dixson Final Honour Scholar in Natural Philosophy (Melb.) 1906. Research Scholar; Principal, Secondary Training College, Bombay. *b.* 6 September 1883. *m.* Miss E. F. Robinson, *Educ.:* Wesley College, Queen's College, Melbourne University; Mathematics Master, Church of England Grammar School, Melbourne; Principal, University High School, Melbourne; Lecturer in Mathematics and Physics, Queen's College, Melbourne; Vice-Principal, Training College, Melbourne; Professor of Physics, Wilson College, Bombay; Principal, Secondary Training College, Bombay. *Publications*: Papers on Physical Subjects in Scientific journals, papers on Educational topics, "The Fundamental Formulæ of Physics," and "General Physical Science." *Address*: Secondary Training College, Bombay.

HAMMOND, SIR (EGBERT) LAURIE LUCAS, B.A. (Oxon.), C.B.E. 1918; C.S.I. 1925; Governor of Assam (1927). *b.* 12 Jan. 1873. *m.* Effie Townsend Warner. *Educ:* Newton Coll., Newton Abbot, S. Devon. and Keble Coll., Oxford. Entered I.C.S. in 1896. *Publications:* Indian Election Petitions, 2 Vols. (Pioneer Press, Allahabad); The Indian Candidate and Returning Officer (Oxford University Press); Member, Executive Council, Bihar and Orissa. *Address:* Government House, Shillong, Assam.

HAR BILAS SARDA, RAI SAHIB, F.R.S.L, M.R.A.S., F.S.S., Member, Legislative Assembly. *b.* 3 June 1867. *Educ.:* Ajmer Government College and Agra College. Was a teacher in Government College, Ajmer, was transferred to Judicial Department in 1892; apptd. Guardian to H.H. the Maharaja of Jaisalmer in 1894; reverted to British service in Ajmer Merwara in 1902; was Subordinate Judge, First Class at Ajmer till 1919 and was Sub-Judge and Judge, Small Causes Court, Beawar, till 1921; Judge, Small Causes Court, Ajmer, 1921-23; officiated as Addl. Dist. and Sessions Judge and retired in Dec. 1923, and was Judge, Chief Court, Jodhpur. Re-elected Member, Legislative Assembly, from Ajmer-Merwara Constituency in 1927. Was elected a member of Royal Asiatic Society of Great Britain and Ireland, Royal Statistical Society of London, Statistical Association of Boston, U.S.A., Royal Society of Literature and Teachers' Guild of Great Britain and Ireland; is Secretary of Paropkarini Sabha of India. *Publications:* Hindu Superiority; Ajmer: Historical and Descriptive; Maharana Sanga; Maharana Kumbha; Maharaja Hammir

of Ranthambhor: Prithviraj Vijaya. *Address*: Civil Lines, Ajmer, Rajputana.

HARI KISHAN KAUL, RAJA PANDIT, M.A., C.S.I., C.I.E., Rai Bahdur. *b.* 1869 *s.* of Raja Pandit Suraj Kaul. C.I.E., *Educ.*: Govt. Coll., Lahore. Asstt. Commsr., 1890; Jun. Secy. to Financial Commsr., 1893-97; District Judge, Lahore, 1897-98; Deputy Commr., Jhang, 1898; Settlement Officer, Muzaffargarh, 1898-1903; S. O. Mianwali, 1903-8; Dy. Commsr., 1906; Dy. Commr., Muzaffargarh, 1908-09; Dy. Commsr., and Supdt., Census Operations, Punjab, 1910-12; Dy. Commsr., Montgomery, 1913; on special duty to report on Criminal Tribes, Dec. 1913-April 1914; Deputy Commissioner for Criminal Tribes, 1917-19; Dy. Commissioner, Jhelum, 1919; Commissioner. Rawal Pindi Divison, 1919-20; Commissioner, Jhulunder Division November 1920 to November, 1923; apptd. to Royal Commission on Services, 1923-1924; Commissioner, Rawal Pindi Division 1924; retired Nov. 1924; Member, Economic Inquiry Committee, 1925; Member, Indian Tariff Board (Cotton Textile Industry Enquiry), 1926-27; Dewan, Bharatpur State, 1927. *Address*: 29, Lawrence Road, Lahore.

HARINGTON, GENERAL SIR CHARLES HARINGTON, G.B.E., K.C.B., D.S.O., D.C.L., General Officer Commanding Western Command. *b.* 31 May 1872. *m.* Gladys Norah Grattan. *Educ.*: Cheltenham College, R. M.C.Sandhurst. The King's Regiment, Bde.Major, 6th Infantry, Bde., Aldershot; B.G.G.S., Canadian Corps; M.G.G.S., Second Army in great war; D.C.I. G.S., War Office G. O. C. Army of Black Sea; G.O.C. Allied Forces of occupation in Turkey G.O.C. Northern Command, England; and G.O.C. Western Command, India. *Address*: Flagstaff House, Quetta.

HARISINGH, MAJOR GENERAL, RAO BAHADUR THAKUR, OF SATTASAR, C.I.E., O.B.E., Army Minister, State Council and G.O.C., Bikaner State Forces. *b.* 1882. *Educ.*: Mayo College. *Address*: Sattasar House, Bikaner.

HARI SINGHJI, SHREEMAN RAO BAHADUR RAJA RAJ SHREE, SAHIB, C.I.E. (1928) Chief of Mahajan; Premier Noble of Bikaner State; Title of "Rao Bahadur" conferred on 12th December 1911. *b.* 16th October 1877. *m.* the daughter of the Thakur Sahibof Sathin in in Jodhpur State in 1894. *Educ.* The Mayo College, and the Government College, Ajmer. Member of Council of the Bikaner State and President of the Walter Krit Rajputra Hitkarini Local Sabha, and President of the Sardars' Advisory Committee Bikaner. *Address*: P. O. Mahajan, Bikaner State Railway.

HARKISHEN LAL, (LALA). *b.* 16 April 1866. *Educ*: Govt. Coll., Lahore and Trinity Coll., Cambridge. Bar-at-Law. Retired from the Bar1,900, since then devoted to Industrial and commercial organisation and activity. President, Reception Committee of the Congress, 1909; President, Industrial Conference held at Bankipur, 1912; gave evidence before the Industrial Commission; Member, Punjab Legislative Council; 1908-1910, 1921-23. Fellow Punjab University; tried under Martial Law regime of 1919 and sentenced to transportation for life and forfeiture of property; released Christmas 1919; President, Punjab Provincial Conference at Jullunder, 1920; appointed Minister. for Agriculture, Punjab 1920; Resigned 1923, since then devoted himself to business and banking. Since retirement organised Peoples' Bank of Northern India Ltd., having long previously brought the Bharat Insurance Co., Ltd., into being. President, Commercial Congress, Delhi in 1926. *Address*: Lahore.

HARNAM SINGH, THE HON. RAJA SIR, K.C.I.E. *b.* 15 Nov. 1851; *y. s.* of late H. H. Raja Rajgan Sir Raja Randher Singh, Bahadur of Kapurthala, G.C.S.I. *m.* 1875, Rani Lady Harnam Singh, 5 *s.* 1 *d.* *Educ.*: Kapurthala. Managed Kapurthala Estates in Oudh, for over 18 years. Served as member of Hemp Drugs Commission in 1893-94; and is Hon. Life Secy. to B. I. Association of Talukdars of Oudh and ex-Fellow of Punjab University, and a life member of the Court of the Lucknow University was member of Imp. Leg. Council and afterwards of Punjab Leg. Council 1900-2; Member of the Council of State since 1920. Member of the Central Committee of the Lady Dufferin Fund; Guest at Coronation 1902. Created Raja 1907. Decorated for General Public Service; Raja hereditary (1922). *Address*: Simla or Lucknow or Jullundur City.

HARRIS, DOUGLAS GORDON, Dip. Ing. (Zurich). C.I.E., M.I.E. (Ind.), Consulting Engineer to Government of India (1925). *b.* 19 Oct. 1883. *m.* Alice, *d.* of Spencer Ackroyd of Bradford, Yorks. *Educ.*: Rugby School and Federal Polytechnic, Zurich, Switzerland. Asst. and Executive Engineer, P.W.D. 1907-14; Under-Secretary to Government, U.P., P.W.D. 1915; Under-Secretary to Government of India, P.W.D., 1916; Secretary to P. W. D. Reorganisation Committee, 1917; Under-Secretary to Government of India, P.W.D. 1918; Asstt. Inspector-General of Irrigation in India, 1920; Secretary to New Capital Inquiry Committee, 1922; Deputy Secretary to Government of India, Department of Industries and Labour, Public Works Branch, 1922. *Publications*: Irrigation in India (Oxford University Press). *Address*: C/o. Department of Industries of Labour, Simla.

HARRISON, CHARLTON SCOTT CHOLMELEY, C.I.E. (1928); Chief Engineer, Lloyd Barrage and Canals Construction. *b.* 18 May 1881. *m.* Violet Murial Monamy, 2nd *d.* of the lat Dr. E. H. Buckell and Mrs. Buckell of Chichester. *Educ*: Coopers Hill. Asst. Engineer P.W.D., Belgaum, 1902-1906; Asstt. Engineer, P. W. D. Irrigation, Nasik, 1906-1909; Ex-Engineer, P. W. D., Irrigation, Nasik 1906-1909; Ex-Engineer, P.W.D., Nasik District 1909-1910; Ex-Engineer, Pravara Canals, Construction Division, 1911-19; Ex. Engineer, Karachi Canals, 1920-21; Superintending Engineer, Sukkur Barrage, 1921-23; Chief Engineer, Lloyd (Sukkur) Barrage and Canals Construction, 1923 to date. *Address*: Karachi, Sind.

HARTNOLL, SIR HENRY SULIVAN, KT.; Chief Judge, Court of Lower Burma, since 1906; Barrister, 1898. *Educ.*: Exeter Grammar School; Trinity College, Oxford. Entered

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HARTOG, SIR PHILIP JOSEPH, KT., C.I.E., M.A., B.Sc., Chairman, Education Committee with the Statutory Commission. *Educ.* University College School; Owen's College, Manchester and Universities of Paris and Heidelberg; C.I.E., Jan. 1917; Member of Commission on Univ. of Calcutta, 1917-19; Vice-Chancellor of Univ. of Dacca since 1920; member of Public Service Commission, Oct. 1920. *Address:* Government of India.

HATWA, MAHARAJA BAHADUR GURU MAHADEV ASRAM PRASAD SAHI OF. *b.* 19 July 1893; *S.* Oct. 1896 to the *Gadi* after death of father Maharaja Bahadur Sir Kishen Pratap Sahi, K.C.I.E., of Hatwa. *Address:* Hathuwa P. O., District Saran, Behar and Orissa.

HAYE, MIAN ABDUL, B.A., LL.B., M.B.E. (1919), M.L.A., Advocate, Lahore High Court. *b.* Oct. 1888. *Educ.:* at Lahore Forman Christian College. Passed LL.B., 1910; started practice at Ludhiana; elected Municipal Commissioner same year; elected Jr. Vice-President 1911 which office he held till 1921 when he was elected senior Vice-President. Is first non-official President of Ludhiana Municipal Council to which office he was elected in 1922. *Address:* President, Municipal Council, Ludhiana.

HENDERSON, ROBERT HERRIOT, C.I.E., Tea Planter (retired), Supdt. of Tarrapur Company's Tea Gardens, Cachar, Assam; Chairman, Ind. Tea Assoc., Cachar and Sylhet. Represented tea-planting community on Imp. Leg. Council, 1901-2, when legislation regulating supply of indentured coolie labour was under consideration. Was Member, Legislative Council of E. Bengal and Assam, President, Manipur State Durbar, 1917-19. *Address:* Bengal Club, Calcutta.

HENEKER, LT.-GENERAL SIR WILLIAM CHARLES GIFFARD, K.C.B. (1919), K.C.M.G. (1922); C.B. (1918); D.S.O. (1902); Connaught Rangers; G.O.C.-in-Chief, Southern-Command. (1928). *b.* 22 August 1867; *m.* 1901 Clara Marion, *d.* of late E. Jones of Velindre, Brecon; two s. Entered army 1888; Capt. 1897; Bt. Major 1901; Bt.-Lt. Colonel 1905; Major 1907; B. Col. and A.D.C. to the King 1907; Major-General 1917; Lt. General 1926; served Southern Nigeria, Second in Command of S. N. Regt., West African Frontier Force, 1902 (promoted Lt.-Col.); Commanded Ubium Ishan, Ibeku-Oloko, Afikpo, Igara and Afikpo Expeditions and columns in Benin Territories Expedition and Aro Expedition; served European War, 1914-18 (wounded); Intelligence and Survey Officer, Benin Territories Expedition, 1899; D.A.A. and Q.M.G. Orange River Colony District, 1906-10; Lt.-Col. to command 2nd Batt., North Stafford Regiment at Peshawar, 1912 Temp. Brig. Commander, 1st Peshawar Infantry Brigade, 1912; Temp. Brigade Commander, Rawalpindi Infantry Brigade 1913; Commander, 1st Infantry Brigade, Quetta, 1914; 54th Infantry Brigade with temp. rank Brig.-General, 1915; Commanded 190th Infantry Brigade 1916; Commanded 8th Div. 1916 to end of war, formed and commanded Southern Div. on Rhine, holding portion of Bridgehead east of Cologne, 1919; Formed and commanded Independent Division, Nov. 1919; G.O.C. Rhine Garrison, Cologne 1920; (Commandeur of Legion d'honneur, 1918; K.C.B.); Commanded British Upper Silesian Force, 1921-22 (K.C.M.G.); Commanded 3rd Division and Salisbury Plain Area 1922-26. *Publication:* Bush Warfare, 1906. *Address:* Headquarters, Southern Command, Poona.

HERAS, HENRY, S.J., M.A., Professor of Indian History, Director of the Indian Historical Research Institute, St. Xavier's College, Bombay, President, Bombay Historical Society; Corresponding Member of the Historical Records Commission for the Bombay Centre. *b.* September 11, 1888, *Educ.* Barcelona (Spain), Cleveland, Ohio, (U.S.A.). Professor of History, Sacred Heart College, (Barcelona); Principal, Our Saviour's College, Saragossa, (Spain). *Publications:* History of the Manchu Dynasty of China (In Spanish) 3 Vols., The Conquest of the Fort of Asirgarh by Emperor Akbar (according to an eye-witness) (in Ind. Ant.) The City of Jinji at the end of the 16th Century (Ibid.). Venkatapatiraya I and the Portuguese (Journal of the Mythic Society). The Statues of the Nayaks of Madura in the Pudu Mantapam (Ibid.). Early Relations between Vijayanagara and Portugal (Ibid.) Asoka's Dharma and Religion (Ibid.); Historical Carvings at Vijayanagara (Ibid); Gea Virogal of the time of Harihara II of Vijayanagara (Ibid). The story of Akbar's Christian Wife (Journal of Indian History.); The Palace of Akbar at Fatehpur-Sikri (Ibdi.); The Great Civil War of Vijayanagara, 1614-1617) (*Ibid.*); Rama Raya, Regent of Vijayanagara (Indian Historical Quarterly); The Last Defeat of Meherakula (Ibid.); Relations between Guptas Kadambas and Vakatakas (Journal of the Bihar and Orissa Research Society); The Royal Patrons of the University of Nalanda (Ibid.) The Portuguese Alliance with the Muhammadan Kingdoms of the Deccan (Journal, B.B.R.A.S.); A Note on the Excavations at Nalanda and its History (Ibid.); Three Mughal Paintings on Akbar's Religious Discussions (Ibid.); Two controversial Points in the Reign of Samudra Gupta (Annals of the Bhandarkar Institute.) The Writing of History; Notes on Historical Mythology for Indian Students (Madras, 1926); The Aravidu Dynasty of Vijayanagara, Vol. I, 1542-1614 (Madras, 1927); *Address:* St. Xavier's College, Bombay.

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1912. Dy. Secretary, Govt. of India Home Deptt., 1915-19; Officiated as Home Secretary on four occasions during that period, Private Secretary to H. E. the Viceroy, 1920. *Address:* Delhi or Simla.

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HOTSON, JOHN ERNEST BUTTERY, M.A (Oxon.), C.S.I. (1926), O.B.E. (1918), V.D. (1923); Member of Council, Bombay (Ap. 1926). *b.* 17 March 1877. *m.* to Mildred Alice, *d.* of late A. B. Steward, I.C.S. *Educ.:* Edinburgh Academy and Magdalen Coll., Oxford. Indian Civil Service, Bombay, from 1900; War service in Baluchistan and Persia, 1915-1920; Rank of Lieut.-Colonel. *Publications:* Editor of the Philatelic Journal of India from 1923. *Address:* Drummore, Malabar Hill, Bombay; or c/o Grindlay & Co., Ltd., P. O. Box 93, Bombay.

HOWARD, ALBERT, C.I.E., M.A., A.R.C.S. F.L.S.; Director of the Institute of Plant Industry, Indore, and Agricultural Adviser to States in Central India and Rajputana. *b.* 1873. *Educ.:* Royal College of Science, London; St. John's College, Cambridge, First Class Hons. Nat. Science Tripos, 1898; B. A., 1899; M. A., 1902; Nycologist and Agricultural Lecturer, Impl. Dept. of Agriculture for West Indies, 1899-1902; Botanist to South-Eastern Agricultural College, Wye 1903-1905; Imperial Economic Botanist to the Government of India, 1905-1924. *Publications: Crop-Production in India,* The development of Indian agriculture; and numerous papers on botanical and agricultural subjects. *Address:* Indore, Central India.

HOWELLS, GEORGE, B.A. (Lond.); M.A. (Camb.); B. Litt. (Oxon); B.D. (St. Andrews); Ph.D. (Tubingen); Principal of Serampore College, Bengal, since 1906. *b.* May 1871. *Educ.:* Gelligaer Grammar School; Regent's Park and University Colleges, London; Mansfield and Jesus Colleges, Oxford; Christ's College, Cambridge; Univ. of Tubingen. Appointed by Baptist Missionary Society for Educational work in India, 1895: located at Cuttack, Orissa, engaged in High School and theological teaching, and general literary and Biblical translation work, 1895-1904; originated movement for reorganisation of Serampore College. Angus Lecturer, 1909: published under the title "The Soul of India.," and Fellow of University of Calcutta, since 1913 and Dean of the Faculty of Arts, 1926. *Address:* Serampore College, Serampore, Bengal.

HUDSON, SIR LESLIE SEWELL, KT. Partner, Mackinnon Mackenzie and Co., Bombay. *b.* 25 Nov. 1872. *Educ.:* Christ's Hospital. Joined P. & O. S. N. Co., London, 1889, and came to their Bombay office 1894, subsequently stationed at Japan, China and Australia, returning to Bombay 1915. Joined Messrs. Mackinnon Mackenzie & Co., Oct. 1916. Deputy Chairman, Bombay Chamber of Commerce 1923-24; President 1924-25, 1927-28. Member Bombay Legislative Council 1923-26, 1927-28. *Address:* Mont Blanc, Dadysett Hill, Bombay

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HUGHES, MAJOR JOHN EDWARD, Secretary, Western India Turf Club, Ltd. *b.* 22nd Nov. 1871, *m.* Evelyn Daisy Brodrick (July 1904). *Educ:* United Service College, Westward Ho; Served 3rd Battn., Royal Welsh Fusiliers, 1890; entered Sandhurst, 1891; commissioned 3rd Septr. 1892; served with Northamptonshire Regiment, 1892; joined 2nd Madras Lancers, 1893; retired from 2nd Madras Lancers 1911; apptd. Secretary, W. I. Turf Club, 1911; served in the war 1914 to 1918 in the Remount Department in India and Mesopotamia; mentioned in despatches. *Address:* Western India Turf Club, Ltd., Poona and Bombay.

HULL, REV. ERNEST R., S.J., Archivist and Secretary to the R. C. Archbishop of Bombay. *b.* 9th September 1863. *Educ:* Society of Jesus, English Province. Came to India 1902 and since then engaged in literary work in Bombay. Editor of *The Examiner* from 1902 to 1924. *Publications:* A series of Examiner Reprints, on theological, historical and controversial subjects. At present engaged in writing a "History of the Bombay Mission with a special study of the Padroado

I.C.S., 1881; served in Burma as Asstt. Commissioner; Dy. Commissioner, 1890; Commissioner, 1902. *Address:* Chief Court, Rangoon.

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1912. Dy. Secretary, Govt. of India Home Deptt., 1915-19; Officiated as Home Secretary on four occasions during that period, Private Secretary to H. E. the Viceroy, 1920. *Address :* Delhi or Simla.

HOOPER, REV. WILLIAM, D.D.; Missionary, C.M.S.; Translator, Mussoorie, since 1892; *b.* 1837. *Educ.:* Cheltenham Preparatory School; Bath Grammar School; Wadham College, Oxford; Hebrew Exhibition; Sanskrit Scholarship; 1st class in Lit. Hum.: B.A., 1859; M.A., 1861; D.D., 1887. Went to India, C.M.S., 1861; Canon of Lucknow, 1906-1919; Vicar of Mount Albert, New Zealand, 1889-90. *Publications:* The Hindustani Language, Notes on the Bible and many smaller works in English, Hindi and Urdu. *Address :* Mussoorie, India.

HOSEASON, WILLIAM SANDFORD, J.P., F.R.M.S., Ordinary Member, Institute of Physics Harbour Master of Bombay from Feb. 1925 *b.* 18 July 1874. *m.* Edith E. Johnson of Liverpool and Karachi. *Educ.:* Schoolship "Conway", Liverpool, Apprentice in sail, 3rd mate and 2nd mate in sail from 1889 to 1895. Thence in steam. Master Mariner, 1899 2nd grade River Surveyor, River Hughli, Bombay Pilot Service, 1901; Master Pilot and Dockmaster, P. & V., and Alexandra Docks during the war and after. Calcutta Naval Volunteers 1892 and 1899, Bombay Vol. Rifles. 2nd-Lieut. 1915; Lieut. 1917 and Indian Defence Force, Bombay Battalion. Lieut. until its disbandment. *Address :* Evelyn House, Apollo Bunder, Bombay.

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HOWARD, ALBERT, C.I.E., M.A., A.R.C.S. F.L.S.; Director of the Institute of Plant Industry, Indore, and Agricultural Adviser to States in Central India and Rajputana. *b.* 1873. *Educ.:* Royal College of Science, London; St. John's College, Cambridge, First Class Hons. Nat. Science Tripos, 1898; B. A., 1899; M. A., 1902; Nycologist and Agricultural Lecturer, Impl. Dept. of Agriculture for West Indies, 1899-1902; Botanist to South-Eastern Agricultural College, Wye 1903-1905; Imperial Economic Botanist to the Government of India, 1905-1924. *Publications : Crop-Production in India,* The development of Indian agriculture; and numerous papers on botanical and agricultural subjects. *Address :* Indore, Central India.

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HUGHES, MAJOR JOHN EDWARD, Secretary, Western India Turf Club, Ltd. *b.* 22nd Nov. 1871, *m.* Evelyn Daisy Brodrick (July 1904). *Educ :* United Service College, Westward Ho; Served 3rd Battn., Royal Welsh Fusiliers, 1890; entered Sandhurst, 1891; commissioned 3rd Septr. 1892; served with Northamptonshire Regiment, 1892; joined 2nd Madras Lancers, 1893; retired from 2nd Madras Lancers 1911; apptd. Secretary, W. I. Turf Club, 1911; served in the war 1914 to 1918 in the Remount Department in India and Mesopotamia; mentioned in despatches. *Address :* Western India Turf Club, Ltd., Poona and Bombay.

HULL, REV. ERNEST R., S.J., Archivist and Secretary to the R. C. Archbishop of Bombay. *b.* 9th September 1863. *Educ :* Society of Jesus, English Province. Came to India 1902 and since then engaged in literary work in Bombay. Editor of *The Examiner* from 1902 to 1924. *Publications :* A series of Examiner Reprints, on theological, historical and controversial subjects. At present engaged in writing a " History of the Bombay Mission with a special study of the Padroado

Question" of which the 1st volume has been published. *Address: The Examiner* Press, Medows Street, Bombay.

HUMPHRYS, LIEUT.- COLONEL SIR FRANCIS HENRY, G.O.B.O. (1928), B. E. (1924). C.I.E. (1920), Sardar-i-ala of Afganistan 1928, Sardar-i-Ali of Afghanistan, 1924, H. B., M's. Envoy Extraordinary and Minister Plenipotentiary at the Court of H. M. The King of Afghanistan, Jan. 1922. *b.* April 24, 1879, *e. s.* of late Rev. Walter Humphrys, M. A. of Elmsleigh, Tywardreath, Cornwall and *g. s.* of George Humphrys of Athcombe, Park, Shaffordshire *m.* Gertrude Mary Deane, *d.* of Sir Harold Deane, K.C.S.I., *Educ:* Shrewabury and Christ Church, Oxford, Joined 2nd Worcesters, 1900; South African War; Joined 25th Punjabis, 1902. Entered Political Dept., Government of India 1903; Dy. Commr., Bannu and Kohat; Pol. Agent Tochi; Malakand, Khyber; Several European War as Pilot R.A.F. 1918; Dy. Foreign Secretary, Govt. of India, 1921. *Address:* British Legation, Kabul, *via* Peshawar.

HUSSAIN, SIR AHMED NAWAB AMIN JUNG BAHDUR, M.A., B.L., C.S.I. (1911); Nawab (1917); K.C.I.E. (1920) ;Minister-in-Waiting on H. E. H. the Nizam since 1915 and Chief Secretary to H.E.H.'s Government. *b.* 11 Aug. 1863. *m.* Fatima, Lady Amin Jung. *Educ* Christian College and Presidency College, Madras, Governor's Scholar; High Court Vakil, 1890; Deputy Collr. and Magte., 1890-92; Asstt. Secretary to the Nizam, 1893; Personal Secretary to Nizam, 1895; Chief Secretary to Nizam's Government, 1905; *Publications:* "Notes on Islam", articles in Periodicals. *Address:* Amin Munzil Saidbad, Hyderabad, Deccan.

HYDARI, A., SIR B.A., NAWAB HYDAR NAWAB JUNG BAHADUR, Finance Minister, Hyderabad. *b.* 8 Nov. 1869. *m.* Amena Najmuddin Tyabji (Kaiser-i-Hind Gold Medal). *Cr.* Knight (1928) *Educ.:* St. Xavier's College, Bombay Joined Indian Finance Dept., 1888; Asstt. Acctt. General U. P., 1890; Dy. Acctt. General, Bombay, 1897; Dy. Acctt. General, Madras 1900; Examiner, Govt. Press Accounts 1901; Comptroller, India Treasuries, 1903, C. P., 1900; lent as Acctt. General, Hyderabad State, 1905; Financial Secretary, 1907; Secretary to Government, Home Dept., (Judicial, Police, Education, etc.), 1911; Ag. Director-General of Commerce and Industries, 1919; Accountant General, Bombay, 1920; Finance and Railway Member, Hyderabad Executive Council, 1921; Official Director, Shahabad Cement Co., Ltd., 1922; Official Director, Singareni Collieries Co., Ltd. 1922; Official Director, N. G. S. Railway Co., Ltd., and Mining Boards, 1925: Chairman, Inter University Board, 1925; First President. Hyderabad Educational Conference in 1915. President, All-India Mahomedan Educational Conference Calcutta (1917); delivered Punjab University Convocation Address 1925. Fellow of the Bombay, Dacca, Aligarh Muslim and Hyderabad Usmania Universities and ex-Fellow, Madras University. Conceived and organised Osmania University, Hyderabad; organised State Archæologcal Department,, especially interested in Ajanta Frescoes and Indian Paintings. also Urdu type. *Address:* Hyderabad, Deccan.

HYDERABAD, LIEUT-GENERAL, HIS EXALTED HIGHNESS ASAF JAH MUZAFFAR-UL-MULK-WAL-MAMALIK NAZAM-UL-MULK NIZAM-UD-DAULA, NAWAB MIR SIR OSMAN ALI KHAN BAHADUR FATEH JANG, G.C.S.I. (1911), G.B.E. (1916); son of the late Lieut.-Genl. Mir Sir Mahboob Ali Khan Bahadur, G.C.B., G.C.S.I., Nizam of Hyderabad; *b.* 1886; *ed.:* privately; Acc. 1911; Lieut.-General in the Army; Hon. Col. of 20th Deccan Horse. *Address:* Hyderabad, Deccan.

IDAR, MAHARAJA OF, since July 1911, MAHARAJA DHIRAJ MAHARAJA; SIR SHRI DOLAT SINGHJI, K.C.S.I. *m.* Maharaniji Shri Poongalianiji. *Heir: s.* Maharaja Kumar Himmatsinghji. *Address:* Himmatnagar (Mahikantha Agency).

IMAM, SYED HASAN, Barrister. *b.* 31 August 1871. *Educ.:* Patna and in England. Called to the Bar (Middle Temple), 1892. Practised at Patna and Calcutta until 1911. Judge of the High Court, Calcutta, 1912-16. Resumed practice at Patna; President, Special Session, Indian National Congress, September, 1918; President, All-India Home Rule League; Delegate to London Conference on Turkish Peace Treaty, 1921. India's representative to the League of Nations, 1923. *Address:* Hasan Munzil, Patna.

INDORE, MAHARAJA OF, H. H. MAHARAJADHIRAJA RAJ RAJESHWAR SAWAI SHRI TUKOJI RAO HOLKAR, BAHADUR. G.C.I.E., *b.* 26th November 1890. *Educ.:* Mayo Chiefs' College, Ajmere; Imperial Cadet Corps. Visited Europe, 1910; attended Coronation, 1911; again visited Europe, 1913 and 1921: abdicated 27th February 1926. Heir: Prince Yeshwantrao Holkar, *b.* 1908. *Address:* Indore, Central India.

INDORE, MAHARAJA OF, HIS HIGHNESS MAHARAJADHIRAJ RAJ RAJESHWAR SAWAI SHRI YESHWANT RAO HOLKAR BAHADUR, (minor) *b.* 6th September 1908; *m.* a daughter of the Junior Chief of Kagal (Kolhapur) in February 1924. Received his education in England from 1920-1923 and has again proceeded to Oxford for higher education" *Address*: Indore, Central India.

IRWIN, 1st Baron of Kirby Underdale in the County of York, (created 1925). The Right Hon. EDWARD FREDERICK LINDLEY WOOD, G.M.S.I., G.M.I.E. Viceroy and Governor-General. *b.* 16 April 1881; *o. surv.* son and heir of 2nd Viscount Halifax; *m.* 1909, Lady Dorothy Evelyn Augusta Onslow, *y. d.* of 4th Earl of Onslow; three *s.* one *d. Educ.:* Eton; Christ Church and All Souls, Oxford (M. A., Fellow). Parliamentary Under-Secretary for the Colonies, 1921-22; President of Board of Education, Oct. 1922, Jan. 1924; Minister of Agriculture, Oct. 1924 Nov. 25; M. P. (U.), Ripon Division, West Riding, Yorks, since Jan. 1910; Late Colonel Yorkshire Dragoons, *Publications*: John. Keble, in Leaders of the Church series: The Great Opportunity (with Lord Lloyd). *Address:* Viceroy's Camp, India.

ISHWARDAS LUKHMIDAS, J.P., Yarn Merchant; *b.* 1872. *Educ.*: St. Xavier's School. For many years connected with Messrs. David Sassoon & Co., Member of the Municipal Corporation; Member, Managing Committee of the Society of the Hon. Presidency Magistrates of Bombay and is on the directorate of several well-known companies including the Port Canning and Land Improvement Company, the Sassoon Spinning and Weaving Company, Ltd., the Sassoon and Alliance Silk Mill Co., Ltd., and the Uinon Mills; trustee of Sir Hurkinsondas Narottam General Hospital; and Treasurer for Pechey Phipson Sanitarium for Women and Children; President of the Managing Council, Sir Harkisondas Narotamdas General Hospital, Member of the Managing Committee of the Lady Northcote Hindu Orphanage, and Member of the Board of David Sassoon Industrial and Reformatory Institute. President, Managing Committee of the Society of Hon. Presidency Magistrates of Bombay; Director, Bundi Portland Cement, Ltd., and Punjab Portland Cement, Ltd.; Member, Managing Committee, Goculdas Tejpal Hospital Nursing Association; Member, Managing Committee of the Helpless Beggars and Vice-President of his own community. Sheriff of Bombay, 1924. Member of the Auditors' Council and Hon. Treasurer of the Bombay Vigilance Association. *Address:* Garden View, Hughes Road, Bombay.

ISRAR, HASAN KHAN, KHAN BAHADUR, DABIRUL-MULK, SIR MAULVI MOHAMMAD, KT., C.I.E., Amirul-Umara, Home Member and President Judicial Council, Bhopal. *b.* Shahjahanpur, 1865. *m.* Lady Isar, daughter of Malak Mohammad Azmat-ullah-Khan, Rais of Shahjahanpur, 1886. *Educ.*: Shahjahanpur and Bareilly. *Address*: Shishmahal, Bhopal, C. I.

IZZAT NISHAN, KHUDA BAKHASH KHAN TIWANA. Nawab, Malik: Dist Judge, Dera Ghazi Khan. *b.* 1866. *Educ.:* Government High School, Shahpore; private training through Col. Corbyn, Deputy Commissioner. Appointed an Hon. Magistrate, 1881; Extra Asst. Commsr., 1894; British Agent in Cabul, 1903-06. *Address:* Khwajabad, District Shahpore, Punjab.

JACKSON, RT. HON. SIR FRANCIS STANLEY, P.C. G.C.I.E., Governor of Bengal (1927) *b.* 21 November, 1870; *y. s.* of 1st Lord Allerton. *m.* 1902. Julia Henrietta, *e. d.* of late H. B. Harrrison-Broadley, M.P. Welton House, Brough. *Educ.*: Harrow, Trinity Coll., Cambridge. Financial Secretary to War Office, 1922-23; Harrow Eleven, Cambridge Eleven (Captain, 1892-93), Yorkshire Eleven; has repeatedly played for Gentlemen v. Players, and All England Teams; served in South Africa, 1900-2; Captain, 3rd Royal Lancaster Regiment; D. L. West Riding, Works, late Lt.-Col. Commanding 27th W. Yorks; late Lt. Col. Commanding 227th W. Yorks; Chairman of the Unionist Party since March 1923; M. P. Howdenshire Division of Yorkshire since 1915. *Address*: Governor's Camp, Bengal.

JACKSON, GILBERT HOLINSHEAD BLOMFIELD, M.A., (Oxon)., I.C.S., Puisne Judge, Madras, High Court. *b.* 26th Jan. 1875. *m.* to Mrs. Jackson. *Educ.* Marlborough College, Merton College. Indian Civil Service. *Address*:—High Court, Madras.

JACKSON, SIR JOHN ERNEST, KT.(1924), C.I.E. A.C.A., J.P., Agent, B. B. & C. I. Railway. Bombay, since 1925. *b.* 26 November 1876. *Educ:* Marborough College. Assistant Auditor, E. Indian Ry.; 1900, Chief Auditor Calcutta Port Trust, 1907: Chief Auditor, B. B. & C. I. Rly., 1911. *Address* "Bombarci," Altamont Road, Cumballa Hill, Bombay.

JADHAV, BHASKARRAO VITHOJI-RAO, M.A. LL.B., M.L.C. Minister of Agriculture, Government of Bombay *b.* May 1867. *m.* to a lady from the Vichare family of Ratnagiri District. *Educ.*: Wilson College, Elphinstone College, and Government Law School. Served in Kolhapur State and retired as Revenue Member of the State Council. Started the Maratha Educational Conference in 1907 and revived the Satya Shodhak movement in 1911, and has been in the Non-Brahmin movement in the Presidency from its inception. Minister of Education, 1924-26; Leader of the Non-Brahmin Party in the Legislative Council: President of the Satyashodhak. Samaj from 1920. *Address:* Secretariat, Bombay.

JAFFER, HON. KHAN BAHADUR SIR EBRAHIM HAROON, Member of the Council of State. *b.* Dec. 27, 1881. *Educ.*: Deccan College, Poona; Landlord and Proprietor of Messrs. Jaffer Jussuff & Co.: President, Anjuman-i-Islam, Poona; Hon. Secy., Islamia School; Managing Trustee of Jame-Musjid and trustee and member of other institutions and funds. President, Poona Islam Gymkhana Committee. Organised Bombay Presidency Muslim League, 1908; General Secretary, Bombay Presidency Muslim Educational Conference Lucknow, 1919, at which All-India Central Khilafat Committee established; Member, Cantonment Reforms Committee: Member, Bombay Legislative Council, 1916-19; represented Bombay Presidency Mussalmans on the Imperial Legislative Council 1919-20. President, 34th Session, All-India Muslim Educational Conference, 1920; President, Third and Seventh Sessions, All-India Cantonment Conference, 1922; and 1928 Member of the Court, and, Executive Council Muslim University, Aligarh, Member, Indian Cinematograph Committee, 1927-28: re-elected to the Council of State, 1926. Created a Knight in July 1926. *Address:* East Street, Poona.

JAGATNARAYAN, PANDIT, Pleader, Chief Court of Oudh. *b.* Dec. 1864. *m.* Srimati Kamalapati, *d.* of P. Sham Narayan Saheb Raina. *Educ.:* Canning Coll., Lucknow; non-official Chairman, Lucknow Municipality; Chairman, Reception Committee, 31st Indian National Congress; Member, Hunter Committee. Was Minister, U. P. Govt., for Local Self-Government and Public Health. *Address*: Golagani, Lucknow.

JAMES, FREDERICK ERNEST, M.A., O.B.E. (1918), Chevalier de l'ordre de Leopold (1920); General Secretary, Y.M.C.A., Calcutta. *b.* 1891. *m.* Eleanor May Thackrah (1919).

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HYDARI, A., SIR B.A., NAWAB HYDAR NAWAB JUNG BAHADUR, Finance Minister, Hyderabad. *b.* 8 Nov. 1869. *m.* Amena Najmuddin Tyabji (Kaiser-i-Hind Gold Medal). *Cr.* Knight (1928) *Educ.:* St. Xavier's College, Bombay Joined Indian Finance Dept., 1888; Asstt. Acctt. General U. P., 1890; Dy. Acctt. General, Bombay, 1897; Dy. Acctt. General, Madras 1900; Examiner, Govt. Press Accounts 1901; Comptroller, India Treasuries, 1903, C. P., 1900; lent as Acctt. General, Hyderabad State, 1905; Financial Secretary, 1907; Secretary to Government, Home Dept., (Judicial, Police, Education, etc.), 1911; Ag. Director-General of Commerce and Industries, 1919; Accountant General, Bombay, 1920; Finance and Railway Member, Hyderabad Executive Council, 1921; Official Director, Shahabad Cement Co., Ltd., 1922; Official Director, Singareni Collieries Co., Ltd. 1922; Official Director, N. G. S. Railway Co., Ltd., and Mining Boards, 1925: Chairman, Inter University Board, 1925; First President. Hyderabad Educational Conference in 1915. President, All-India Mahomedan Educational Conference Calcutta (1917); delivered Punjab University Convocation Address 1925. Fellow of the Bombay, Dacca, Aligarh Muslim and Hyderabad Usmania Universities and ex-Fellow, Madras University. Conceived and organised Osmania University, Hyderabad: organised State Archæologcal Department., especially interested in Ajanta Frescoes and Indian Paintings. also Urdu type. *Address:* Hyderabad, Deccan.

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IMAM, SYED HASAN, Barrister. *b.* 31 August 1871. *Educ.:* Patna and in England. Called to the Bar (Middle Temple), 1892. Practised at Patna and Calcutta until 1911. Judge of the High Court, Calcutta, 1912-16. Resumed practice at Patna; President, Special Session, Indian National Congress, September, 1918; President, All-India Home Rule League; Delegate to London Conference on Turkish Peace Treaty, 1921. India's representative to the League of Nations, 1923. *Address:* Hasan Munzil, Patna.

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ISRAR, HASAN KHAN, KHAN BAHADUR, DABIRUL-MULK, SIR MAULVI MOHAMMAD, KT., C.I.E., Amirul-Umara, Home Member and President Judicial Council, Bhopal. *b.* Shahjahanpur, 1865. *m.* Lady Isar, daughter of Malak Mohammad Azmat-ullah-Khan, Rais of Shahjahanpur, 1886. *Educ.*: Shahjahanpur and Bareilly. *Address*: Shishmahal, Bhopal, C. I.

IZZAT NISHAN, KHUDA BAKHASH KHAN TIWANA. Nawab, Malik; Dist Judge, Dera Ghazi Khan. *b.* 1866. *Educ.*: Government High School, Shahpore; private training through Col. Corbyn, Deputy Commissioner. Appointed an Hon. Magistrate, 1881; Extra Asst. Commsr., 1894; British Agent in Cabul, 1903-06. *Address*: Khwajabad, District Shahpore, Punjab.

JACKSON, RT. HON. SIR FRANCIS STANLEY, P.C. G.C.I.E., Governor of Bengal (1927) *b.* 21 November, 1870; *y. s.* of 1st Lord Allerton. *m.* 1902. Julia Henrietta, *e. d.* of late H. B. Harrrison-Broadley, M.P. Welton House, Brough. *Educ.*: Harrow, Trinity Coll., Cambridge. Financial Secretary to War Office, 1922-23; Harrow Eleven, Cambridge Eleven (Captain, 1892-93), Yorkshire Eleven; has repeatedly played for Gentlemen v. Players, and All England Teams; served in South Africa, 1900-2; Captain, 3rd Royal Lancaster Regiment; D. L. West Riding, Works, late Lt.-Col. Commanding 27th W. Yorks; late Lt. Col. Commanding 227th W. Yorks; Chairman of the Unionist Party since March 1923; M. P. Howdenshire Division of Yorkshire since 1915. *Address*: Governor's Camp, Bengal.

JACKSON, GILBERT HOLINSHEAD BLOMFIELD, M.A., (Oxon)., I.C.S., Puisne Judge, Madras, High Court. *b.* 26th Jan. 1875. *m.* to Mrs. Jackson. *Educ.* Marlborough College, Merton College. Indian Civil Service. *Address*:—High Court, Madras.

JACKSON, SIR JOHN ERNEST, KT.(1924), C.I.E. A.C.A., J.P., Agent, B. B. & C. I. Railway. Bombay, since 1925. *b.* 26 November 1876. *Educ*: Marborough College. Assistant Auditor, E. Indian Ry.; 1900, Chief Auditor Calcutta Port Trust, 1907; Chief Auditor, B. B. & C. I. Rly., 1911. *Address* "Bombarci," Altamont Road, Cumballa Hill, Bombay.

JADHAV, BHASKARRAO VITHOJI-RAO, M.A. LL.B., M.L.C. Minister of Agriculture, Government of Bombay *b.* May 1867. *m.* to a lady from the Vichare family of Ratnagiri District. *Educ.*: Wilson College, Elphinstone College, and Government Law School. Served in Kolhapur State and retired as Revenue Member of the State Council. Started the Maratha Educational Conference in 1907 and revived the Satya Shodhak movement in 1911, and has been in the Non-Brahmin movement in the Presidency from its inception. Minister of Education, 1924-26; Leader of the Non-Brahmin Party in the Legislative Council: President of the Satyashodhak. Samaj from 1920. *Address*: Secretariat, Bombay.

JAFFER, HON. KHAN BAHADUR SIR EBRAHIM HAROON, Member of the Council of State. *b.* Dec. 27, 1881. *Educ.*: Deccan College, Poona; Landlord and Proprietor of Messrs. Jaffer Jussuff & Co.: President, Anjuman-i-Islam, Poona; Hon. Secy., Islamia School; Managing Trustee of Jame-Musjid and trustee and member of other institutions and funds. President, Poona Islam Gymkhana Committee. Organised Bombay Presidency Muslim League, 1908; General Secretary, Bombay Presidency Muslim Educational Conference Lucknow, 1919, at which All-India Central Khilafat Committee established; Member, Cantonment Reforms Committee: Member, Bombay Legislative Council, 1916-19; represented Bombay Presidency Mussalmans on the Imperial Legislative Council 1919-20. President, 34th Session, All-India Muslim Educational Conference, 1920; President, Third and Seventh Sessions, All-India Cantonment Conference, 1922; and 1928 Member of the Court, and, Executive Council Muslim University, Aligarh, Member, Indian Cinematograph Committee, 1927-28: re-elected to the Council of State, 1926. Created a Knight in July 1926. *Address*: East Street, Poona.

JAGATNARAYAN, PANDIT, Pleader, Chief Court of Oudh. *b.* Dec. 1864. *m.* Srimati Kamalapati, *d.* of P. Sham Narayan Saheb Raina. *Educ.*: Canning Coll., Lucknow; non-official Chairman, Lucknow Municipality; Chairman, Reception Committee, 31st Indian National Congress; Member, Hunter Committee. Was Minister, U. P. Govt., for Local Self-Government and Public Health. *Address*: Golagani, Lucknow.

JAMES, FREDERICK ERNEST, M.A., O.B.E. (1918), Chevalier de l'ordre de Leopold (1920); General Secretary, Y.M.C.A., Calcutta. *b.* 1891. *m.* Eleanor May Thackrah (1919).

Educ: Leeds and London University. Lecturer at Leeds University, Army 1914-15, discharged on account of illness. Belgian Red Cross, Y.M.C.A., Abbeville Amiens Tank Corps, 1916-19; General Secry., Y. M. C. A., Belgium and Occupied Germany; 1919-20; General Secretary, Y. M. C. A., Calcutta, 1920; Member, Bengal Legis. Council, 1924-26; Re-elected 1926; President, Calcutta Rotary Club, 1925-6; visited Persia *re* welfare of British employers in A. P. O. C., 1924; visited British East Indies, 1927 in establishment of Y. M. C. A. *Publications:* Brochures on Kenya League of Nations. Many articles on social reform. *Address:* 5, Victoria Terrace, Calcutta.

JAMES, MAJOR-GENERAL Sir WILLIAM BERNARD; KT. 1925, C.B. (1918); C.I.E., (1912); M.V.O. (1911). *b.* 8 Feb. 1865. *m.* Elizabeth Minto, *e. d.* of late William Minto of Tingri Estate, Assam. two *s.* *Educ:* U. S. College and Sandhurst. 1st Commission in 1886, Derbyshire Regiment 1888, 2nd Lancers, Intelligence Branch War Office 1900-01; South African War 1902; various staff appointments in India; A. Q. M. G. Coronation Durbar, 1911; D. A. & Q. M. G. Corps, France 1914-15; Brig.-General, General Staff, France, 1915-16; (Despatches) Brevet Colonel. Temp. Q.M.G. India 1916-17; Major-General, Administration, Southern Command, 1917-20. Commanding Bombay District, 1919-22; Director of Remounts, India, 1922-26. Founder and thrice President of the National Horse Breeding and Show Society of India 1923. *Address:* C/o Messrs. Grindlay & Co., Ltd., Bombay.

JAMIAT RAI, DIWAN RAI BAHADUR, C.I.E., DIWAN BAHADUR, *b.* 1861, *m.* 1891. *Educ.* Bhown, Kohat, and Gujrat, Ent. Govt. Service, 1880, served in 1880, Political Office with Kuram F. F., 1880; accompanied Afghan Boundary Commission, 1885-1886; special duty, boundary settlement of Laghari Barkhan, 1897; Asst. to the Supdt. of Gazetteers of Baluchistan, 1902-07; services acknowledged by Govt. of India; on special duty in connection with revision of Establishments, 1910; Asst. to Supdt. of Census Operations, Baluchistan, 1910-11; Ex. Asst. Commsr., 1902: Settlement Officer, Baluchistan, 1912; Provincial Superintendent of Census for Baluchistan, 1920-22; President, Hindu Panchayat Member, Dufferin Fund Committee. Member, Prov. Council Boy Scouts; Member, Provincial Ex. Committee Red Cross-Society, Grammar School Committee. *Publication:* Quetta Municipal Manual; History of Freemasonry in Quetta; Reports on the settlement of Duki and Barkkhan; Notes on (1) Domiciled Hindus, (2) Hindus of Kandahar and Ghazni, (3) Purabi menial castes and sweepers, (4) Afghan Pawindhas, (5) Achakzai Pathans, (6) Shinwar, (7) Shorarud Valley and (8) Revenue rates and conditions, (9) Nutts—a wandering tribe, (10) Kharan State, (11) Hindus of Dhadar, (12) Cottage Industries of Baluchistan, (13) Administration of justice in rural areas of Baluchistan, (14) Notes on the study of the Brahui Language, (15) Manual (in Urdu) of Pushtu conversation, (16) Translation into English of the Balochi Text Book, and (7) Translation into Urdu of Bengali Girih-dharma. *Address:* Quetta.

JANAK SINGH, MAJOR-GENERAL RAI BAHADUR, B.A., C.I.E., Cabinet Minister. *b.* 1877 *Educ.* Joined Kasmir Service in 1901 serving in various capacities both in Civil and Military Deptts. In the Civil Branch as Naib Tehsildar, Tehsildar, Dist. Magte. and Sessions Judge and finally as Revenue Minister. In the Military Branch as Dy. Asst. Quarter-Master General, Brigade-Major, O. C. the 2/2 Kashmir Rifles and 3rd Kashmir Rifles. Got Afghan War Medal 1919; Military Secretary to Commander-in-Chief, Jammu and Kashmir State Forces, and Army Minister, Army and Revenue Minister, Jammu and Kashmir Government *Address:* Jammu.

JAORA STATE, LIEUT.-COLONEL H. H. FAKHAR-UD DAULA NAWAB SIR MUHAMMED IFTIKHAR AL. KHAN BAHADUR SAULAT JANG., K.C.I.E. *b.* 1883. H. H. served in European War. *Address:* Jaora State, Central India.

JATKAR, BHIMRAO HANMANTRAO, B.A., LL.B. Pleader and Member, Legislative Assembly, *b.* 24 April 1880. *m.* to Annapurnabai Jatkar. *Educ.:* at Basim A. V. School, Amraoti High School, Fergusson College, Poona, and Govt. Law School, Bombay. Joined Yeotmal Bar in 1906; a Congressman working as one of the Joint Secretaries of the District Association, Yeotmal, since its inception in 1915; non-official elected Chairman, Yeotmal Municipality, since 1919. *Address:* Yeotmal (Berar).

JAYAKAR, MUKUND RAMRAO, M.A., LL.B., Bar-at-Law, Member, Legislative Assembly. *Educ.:* at Bombay University. Started a charitable public school called Aryan Education Society's High School in Bombay, worked there four years; practised as a barrister in Bombay High Court; took to public life in 1916 and since 1921 completely in public life; elected to Bombay Legis. Council in 1923 by the Bombay University Constituency; and was leader of the Swaraj Party in Bombay Council until his resignation after the meeting of the Congress in 1925. *Publication:*—Edited a book on Vedanta Philosophy in 1924. *Address:* 391, Thakurdwar, Bombay 2.

JAYANTI RAMAYYA PANTULU, B.A., B.L. *b.* Aug. 1861. *Educ.:* at Rajahmundry and Madras, Served in Rev. Deptt. in Madras Presidency and retd. as 1st Grade Depy. Collr., 1917; acted as Presidency Magistrate, Madras, for three years. Member, Legislative Assembly. *Publications:* A defence of literary Telugu and several articles on literature, history and archæology. *Address:* Muktisvaram, Tottaramudi P. O. East Godavari Dist.

JEELANI, DR. HAJI SYED ABDUL KHADER SAHEB, Member, Legislative Assembly and retired Medical Officer and Superintendent of District Jail. *b.* July 1867; *m. d.* of Subadar Major Yacoob Khan Saheb Sirdar Bahadur. *Educ.* at Saint Thomas Mount, Madras. Was Member, Cantonment Committee for 14 years; member, district board for 12 years of which for 3 years was Vice-President; and Hon. Magte. for Madras for seven years. *Address:* Saint Thomas' Mount, Madras.

JEFFERY, COLONEL WALTER HUGH, C.I.E. (1914); C.S.I. (1924); General Staff, Army Headquarters, *b.* 15 Dec. 1878. *m.* Cicely Charlotte Cowdell. *Educ.:* at Blundells, Tiverton and Plymouth College. *Address:* Simla.

JEHANGIR, SIR COWASJEE, 1st Baronet; nephew and adopted son of late Sir Cowasjee Jehangir Readymoney, C.S.I. *b.* 8th June 1853. *m.* 876, Dhunbai, *d.* of the late Ardeshir Hormusjee Wadia; one *s.* 2 *d.* *Educ.:* Proprietary School; Elphinstone College and University of Bombay. Banker, millowner and landed proprietor; J.P. Created knight 1895, created Baronet 1908; well-known for his philanthropy. Delegate of the Parsee Matrimonial Court; and Trustee and member of the Parsee Panchayet. Appointed Sheriff of Bombay in 1919; has assumed the name of Cowasjee Jehangir. *Address:* Readymoney House, Malabar Hill, Bombay.

JEHANGIR, COWASJI, SIR (Junior) M.A. (Cambridge), K.C.I.E. (1927), C.I.E. (1920), O.B.E. *b.* Feb. 1879; *m.* to Hirabai, d. of M.H.A. Hormasji of Lowji Castle. Educated at St. Xavier's College, Bombay, and St. John's College, Cambridge. Member of the Bombay Corporation from 1904-1921; Chairman of the Standing Committee, 1914-15; Member of the Bombay Improvement Trust; President, Bombay Municipal Corporation, 1919-20; Honorary Secretary, War Loan Committee, 1917-1918; Acting Member of the Executive Council, Government of Bombay, in charge of the Revenue Department (6th Dec. 1921 15th July 1922); Member of the Executive Council, Government of Bombay, in charge of the General Department (23rd June 1923—23rd June 1928). Partner in the Firm of Messrs. Cowasjee Jehangir & Co. Ld. *Address:* Nepean Sea Road, Malabar Hill, Bombay.

JEJEEBHOY, SIR JAMSETJEE, 5th Baronet, K.C.S.I., Vice-Presdt., Legis. Assembly. *b.* 6th March 1878; *s.* father Sir Jamsetjee, 1908, and assumed the name of Jamsetjee Jejeebhoy in lieu of Rustomjee; Head of the Zoroastrian Community in Bombay; Pres. of the Sir Jamsetjee Charity Funds, and Member of Municipal Corporation. *m.* 1906, Serenebai Jalbhoy Ardesar Sett. *Address:* Mazagon Castle, Bombay.

JEVONS, HERBERT STANLEY, M.A., B.Sc. (Lond.), F.G.S., F.S.S.; Prof. of Economics in Univ. of Rangoon since 1923. *b.* 8 October 1875. *Educ.:* Giggleswick Gram. Sch. University Coll., London; Trin. Coll., Cambridge; Geol. Inst., Heidelberg Univ. Demonstrator in Petrology, Cambridge, 1900-01; Lecturer in Minerology and Geology, and Asst. to Prof. Sir T. W. Edgeworth David, F. R. S., in University of Sydney, N. S. W., 1902-04; Lectr. and later Fulton Prof. of Econ. and Pol. Science in Univ. Coll. of S. Wales and Monmouthshire, Cardiff, 1905-11; engaged in garden city and housing reform propaganda, 1911-14. Professor of Economics in the University of Allahabad, 1914-23. Has undertaken researches in rural economics, irrigation on periodicity in Economic Phenomena and Indian Currency and Finance, 1915-1921. Formerly editor of the Indian Journal of Economics, and Hon. Treas. Indian Economic Association. *Publications:* Essays on Economics; The Sun's Heat and Trade Activity; The British Coal Trade; Consolidation of Agricultural Holdings in the U.P.; Economics of Tenancy Law and Estate Management; Money, Banking and Exchange in India; The Future of Exchange; and numerous books, papers and articles on Petrology, Minerology, Economics, Politics, Housing Reform, etc. *Address:* University College, Rangoon.

JEYPORE, MAHARAJA OF, LITUTMNANT SRI SRI SRI MAHARAJA RAMCHANDRA DEO MAHARAJA OF JEYPORE SAMASTHANAM M.L.C., Pro-Chancellor, Andhra University *s.* of late Maharaja Sir Sri Vikrama Deo Bahadur, K.C.I.E., and late Sri Sri Sri Lady Seethapatta Maharani Circar. *b.* 31st Dec. 1893. *Educ.:* privately under Dr. J. Marsh, M.A., LL.D., Newton, Esq., M.A., and E. Winckler, Esq., B.A. *m.* 1913 Sri Sri Sri Lakshmi Patta Maharani Circar, *d.* of the late Maharajah Sir Sri Bhagavat Prasad Singh Bahadur, K.C.I.E., of Balrampur, United Provinces of Agra and Oudh. First Landed Zamindar in the Madras Presidency, owning about 14,000 square miles. *Address:* Fort, Jeypore, Vizagapatam Agency, Madras Presidency, India.

JHALA, RAJ RANA SHRI MANSINHJI SURATSINHJI, C.I.E. (1918); Dewan, Dhrangadhra State and some time Member, State Cabinet at Jaipur, Rajputana. *Educ.:* Dhrangadhra and Rajkot. Was first Guardian to H. H. Maharaja Saheb of Dhrangadhra when he was Heir-Apparent and accompanied him to England; was afterwards for a few years in Government service and left it as Dy. Superintendent of Police to join service in his parental State, where he was for a year Personal Assistant to H. H. Maharaja Saheb and then his Dewan. Member of the State Council, Jaipur, from Dec. 1922 to March 1923. *Address:* Lal Bungalow, Dhrangadhra.

JHALAWAR, H. H. MAHARAJ RANA SIR BHAWANI SINGH BAHADUR OF; K.C.S.I.; *b.* 1874; *s.* 1899. *Educ.:* Mayo Coll., Ajmer. Has greatly extended education throughout the State and established several libraries. Made a "Round the World Tour" in 1925. *Via* Panama Canal. Has travelled over a great part of Europe and has a taste for Music, Science and Literature. Was a Research Student at New Oxford College, Oxford, and is a fellow of the Chemical Society and Vice-President of the India Society; Member, Royal Institution of Great Britain, Royal Astronomical Society, Royal Botanical Society, Royal Aeronautical Society, Royal Asiatic Society, Royal Society of Arts, League of Nations Union and Zoological Society, London, and a Member of the American Chemical Society. *Publication:* Travel Pictures and Rabies and its Treatment. *Address:* Jhalrapatan, Rajputana.

JIND, H. H. FARZAND-I-DILBAND RASIKH-UL ITIKAD DAULAT-I-INGLISHIA, RAJA-I-RAJGAN MAHARAJA SIR RANBIR SINGH RAJENDRA BAHADUR, COLONEL, G.C.I.E., K.C.S.I. *b.* 1879; *s.* 1887. *Address:* Sangrur, Jind State, Punjab.

JINNAH, MAHOMED ALI, Bar.-at-Law and Member, Leg. Assembly, *b.* 25th Dec. 1876. *m. d.* of Sir Dinshaw Petit. (*d.*) *Educ.* Karachi and in England. Enrolled as Advocate, Bombay High Court, 1906; Pte. Secretary to Dadabhoy Naoroji, 1906; Member, Imperial Legis. Council, 1910; President, Muslim League (special session) 1920. *Address:* Malabar Hill, Bombay.

JODHPUR, MAJOR HIS HIGHNESS RAJ RAJESHWAR SARAMAD RAJHAL-HINDHUSTAN MAHARAJA DHIRAJ SRI SIR UMED SINGHJI SAHIB BAHADUR OF K. C. V. O. (1922); K. C. S. I. (1925). *b.* 8 July, 1903, *m.* H. H. Maharaniji Sri Vadan Kanwarji Sahiba of Umednagar. *Educ*: Mayo College, Ajmer. Ascended the *Gadi*, 1918; invested with full ruling powers 1923. *Address:* Jodhpur, Rajputana.

JOGLEKAR, RAO BAHADUR RAMCHANDRA NARAYAN, I.S.O., B.A., Chief Land Officer, Tata Co., Coll. Baroda State, from Decr. 1916 to June 30, 1920. Depy. Coll. First grade and Native Asst. to Commsr., C.D., 1901-16; some time Adv. to Chief of Ichalkaranji; *b.* Satara, 8th Dec. 1858. *Educ.:* Deccan Coll., Poona. Held non-gazetted appointments in Nasik, Satara, Ahmednagar, Poona and Sholapur Dists., 1883-1899; Depy. Coll., 1899. *Publications*: Land Revenue Code annotated up to 1st Octr. 1920; Watan Act annotated up to 1st Sept. 1920; Alienation Manual; Inspection of Revenue offices; Court fees in Revenue and Magisterial offices. *Address:* 203, Kala Haud, Shukrawar Peth,; Poona City.

JOHN, SIR EDWIN, KT. (1922), C.B.E., 1921. Kt. of the Order of St. Gregory the Great, (Civil Order) 1901. Grand Commander, St. Sylvester the Great (1920); Inspector-General of Factories, Gwalior, C. I., *b.* 3 August 1856, *m.* 1879, Mary Sykes, Southport Lancs; one *d.* *Educ:* Stonyhurst. *Address:* Gwalior, C.I.

JOHNSTON, SIR FREDERICK WILLIAM, K.C.I.E. C.S.I., Agent to the Governor-General and Chief Commissioner in Baluchistan; *b.* 2 Nov. 1872. *m.* 1905 Gertrude Helen, *d.* of the late Lt.-Col. J. Young, one *s.* *Educ.:* Kelvinside Acad., Glasgow; Trinity Hall, Cambridge (B.A., 1894). Joined the Punjab Commission as Asst. Commsr., 1896; went to N.-W. Fron., 1899; and was employed there till end of 1911, Govt. of India, Finance Dept., 1911-15; Ministry of Munitions, England, 1915-17 *Address:* The Residency, Bushire, Persian Gulf.

JOSHI, SIR MOROPANT VISHVANATH, KT., K.C.I.E., B.A., LL.B., *b.* 1861. *Educ.:* Deccan Coll., Poona, and Elphinstone Coll., Bombay. Practised as Advocate in Judicial Commr.'s Court in Berar from 1884-1920. Home Member, C. P. Govt., 1920-25. *Address:* Nagpur, C. P.

JOSHI, NARAYAN MALHAR, B.A., M.L.A., Member of the Servants of India Soc. *b.* June 1879. *Educ.:* Poona New English School and Deccan Coll. Taught in private schools and Govt. High Schools for 8 years. Joined Servants of India Soc., 1909. Sec., Bombay Social Service League, since 1911, and Sec. Bombay Presy. Social Reform Assoc., since 1917; Sec., W. India Nat. Liberal Assoc. since 1919. Was sent to Mesopotamia by Govt. of India as representative of the Indian Press, 1917, and in 1920 to Washington and in 1921 and 1922 and in 1925 to Geneva as delegate of the working classes in India to International Labour Confce. Kaisar-i-Hind Silver Medal (1919), Was awarded, but declined C. I. E. in 1921. Member of the Bombay Municipal Corpn. since 1919, up to end of March 1923. Nominated by Govt., a Member of the Legislative Assembly in 1921 and again in 1924 and in 1927 to represent labour interests. *Address:* Servants of India Society, Sandhurst Road, Bombay.

JUNAGADH, H. H. SIR MAHABATKHANJI RASULKHANJI, K.C.S.I., Nawab Saheb of. *b.* 2nd Aug. 1900. *m.* Her Highness Senior Begum Saheba Manuvvarjahan of Bhopal. *Educ.:* Mayo College, Ajmer. *Address:* Junagadh.

JUGMOHANDAS VARJIVANDAS, SIR, KT. Merchant and Landlord. *b.* 1869. *Educ.:* Fort High Sch., Bombay. Mem., Bombay Corpn., 1900-06; trustee of several charitable institutions. *Address:* Bombay.

JUKES, JOHN EDWIN CLAPHAM, C.I.E. (1921), Controller of Civil Accounts *b.* 12 Nov. 1878. *Educ.:* Aldenham Sch., Pembroke Coll., Cambridge. Porson Univ. prizeman, 1899. Chancellor's Classical Medallist, 1902. *m.* Marguerite Jessie, *d.* of the late James Searle of Reigate. *Address:* Delhi and Simla.

KAJIJI, ABDEALI MAHOMEDALI, B.A. LL.B. (Cantab.), Bar.-at-Law; late Judge, High Court, Bombay. *b.* 12 February 1871. *Educ.:* St. Mary's Institution, Byculla; St. Xavier's Coll., Bombay, Downing Coll., Cambridge, and Lincoln's Inn. Ord. Fellow, Syndic and Dean in Law of Bombay Univ.; President, Anjuman-i-Islam, Bombay and Islam Club and Vice-President, Islam Gymkhana. *Address:* Dilkhoosh, Grant Road, Bombay.

KALE, VAMAN GOVIND. Professor, Fergusson College. *b.* 1876, *Educ.:* New English School and Fergusson Coll., Poona. Joined the Deccan Education Socy. of Poona, as a life member in 1907. Fellow of Bombay Univ. for five years since 1919. Prof. of History and Economics, Fergusson Coll., Member, Council of State, 1921-23, and member, Indian Tariff Board, 1923-25, Secretary, D. E. Society, Poona, from 1925 to 1928. Liberal in Politics, has addressed numerous public meetings; has published many articles on economics and political and social reform, and the following works: "Indian Industrial and Economic Problems," "Indian Administration", "Indian Economics," "Dawn of Modern Finance in India," "Gokhale and Economic Reforms," "India's War Finance," Currency Reform in India," "Constitutional Reforms in India," etc. *Address:* Fergusson Coll., Poona and "Durgadhivasa", Poona, No. 4.

KAMAT, BALKRISHNA SITARAM, B.A., Merchant. *b.* 21 March, 1871. *Educ.:* Deccan Coll. *m.* Miss Yamunabai R. M. Gawaskar of Cochin. Member, Bombay Legis. Council, 1913-16, 1916-20, Member, Legislative Assembly, 1921-23 Liberal); Member, Kenya Deputation to England 1923: Member of various other educational bodies: Has taken part in work for social and agricultural reform, lately Member, Roy' Commission on Indian Agriculture. *Address:* Ganeshkhind Road, Poona, or Dongre Building, Tardeo, Bombay.

KANDATHIL, MOST REV. MAR. AUGUSTINE D.D. Archbishop Metropolitan of Ernakulam, Was Titular Bishop of Arad and Co-adjutor

with right of succession to the first Vicar Apostolic of Ernakulam, since 1911; *b.* Chemp, Vaikam, Travancore, 25 Aug. 1874. *Educ.:* Papal Seminary, Kandy, Ceylon. Priest, 1901. Parish Priest for some time: Rector of Prep. Sem., Ernakulam, and Private Sec. to the first Vicar Apostolic of Ernakulam to end of 1911. *s.* Rt. Rev. Dr. A. Pareparambil as Second Vicar-Apostolic, 9 Decr. 1919; Installed on 18 Decr., 1919. was made Archbishop Metropolitan 21st Dec. 1923; (Suffragan sees being Changanacherry, Trichur and Kottayam); Installation 16 Nov. 1924. *Address:* Archbishop's House, Ernakulam, Cochin State.

KANHAIYA LAL, THE Hon. MR. JUSTICE, RAI BAHADUR, M.A., LL.B., Judge, High Court, Allahabad, *b.* 17 July 1866. *m.* Shrimati Devi, *d.* of Vyas Gokuldasji of Agra. *Educ.:* The Muir Central College, Allahabad; joined the U. P. Civil Service on 22 April 1891 as Munsiff, acted as Subordinate Judge in 1907; appointed Asst. Sessions Judge with the powers of Additional District Judge in Feb. 1908; acted as District and Sessions Judge in 1910 and again in 1911; appointed Additional Judicial Commissioner, Oudh, July 1912; acted as Judge of Allahabad High Court in 1920 and subsequent years for different periods. Promoted Judicial Commissioner of Oudh in 1922. Appointed Judge of Allahabad High Court again in 1923. *Publications:* Elementary History of India; Dharma Shiksha or a treatise on Moral culture in the vernacular; and A Note on the Reorganisation of the Judicial Staff. *Address:* No. 9, Elgin Road, Allahabad.

KANIKA, THE RAJA OF, RAJA RAJENDRA NARAYAN BHANJA DEO BAHADUR, O.B.E., OF KANIKA; M.L.C. M.R.A.S., and F.R.S.A., *b.* 24 March 1881. *m. d.* of Feudatory Chief of Nayagarh, 1899. *Educ.:* Ravenshaw Coll. Sch.; Coll., Cuttack. Received management of Killah Kanika from Court of Wards, 1902; Mem. of the Bengal Leg. Council, 1909-12; Mem. of Bihar and Orissa Leg. Council, 1912-16; Member, Imperial Leg. Council, 1916-20; Mem., Bihar and Orissa Legislative Council, 1921; Member, Reformed Legislative Assembly 1922-23; Member, Bihar and Orissa Reformed Council 1923. Pres., Orissa Landholders' Assn.; Vice-President Bengal Landholders' Association; Vice-President, Bihar Landholders' Association; Mem. of Bengal Fishery Board; Mem., Roy. Asiatic Soc. Member, Governing Body, Ravenshaw College, Cuttack; Fellow, Patna University. *Address:* Cuttack or Rajkanika, Orissa.

KANITKAR, KESHAV RAMCHANDRA, M.A. B.Sc., Principal and Professor of Physics Fergusson College, Poona. *b,* 22 Aug. 1876, *Educ:* New English School at Wai and Poona and Fergusson College, Poona. Working as Life Member in the D. E. Society's institution since 1903; was in charge of the Boarding House, New English School in 1905; in charge of Fergusson Coll. Hostels, 1906-14 in charge of Navin Marathi Shala, 1914-21 in charge of Fergusson College since 1921 has been on the Bombay University Senate for the last 12 years and on the School Leaving Examination Board for the last 6 years and Chairman, Poona District School Board for the last three years, represented western part of Poona on the Poona City Municipalty for nearly 7 years and worked on the Visweshwaraya Technical Education Committee, 1920. *Address:* Fergusson College, Poona.

KAPURTHALA. COLONEL HIS HIGHNESS FARZAND-I-DILBAND RASIKHUL-ITIKAD DAULAT-I-INGLISHIA RAJA-I-RAJAGAN MAHARAJA JAGATJIT SINGH BAHADUR, Maharaja of Kapurthala, G.C.S.I. (1911), G.C.I.E. (1918), Cr. G.B.E. (1927) on the occasion of his Golden Jubilee, Honorary Colonel of 3-11th Sikhs (45th Rattrays Sikhs). One of the principal Sikh Ruling Princes in India. In recognition of the prominent assistance rendered by the State during the Great War His Highness' salute was raised to 15 guns and the annual tribute of £9,000 a year was remitted in perpetuity by the British Government; received the Grand Cross of the Legion d'Honneur from the French Government in 1924, possesses also Grand Cross of the Order of the Star of Roumania, Grand Cordon of the Order of the Nile, Grand Cordon of the Order of Morocco, Grand Cordon of the Order of Tunis, Grand Cross of the Order of Chili, Grand Cross of the Order of the Sun of Peru, Grand Cross of the Order of Cuba; twice represented Indian Princes and India on the League of Nations in 1926 and 1927, celebrated the Golden Jubilee of his reign in 1927 with great eclat. *b.* 24 Nov 1872; son of His Highness the Late Raja-i-Rajgan Kharak Singh of Kapurthala *Address:* Kapurthala State, Punjab, India.

KARANDIKAR, RAGHUNATH PANDURANG. High Court Pleader, Bombay, Professor, Law. College, Poona, and Member, Council of State. *b.* 21 Aug. 1857 in Khadilkar family, adopted into Karandikars 1865. *m.* Sakhutai, *d.* of Rao Saheb Gogte of Pandharpur (1872). *Educ.:* at Satara and Poona. Sub-Judge (1884); Member, Bhor Forest Committee (1885); visited England 1908, Member elected Bombay Legislative Council 1911; attended His Imperial Majesty's Coronation at Delhi 1912; member of all Congresses and Committees 1886-1918; second visit to England 1918; opened first Indian Conference at Ilkaly, Yorkshire, 1919; attended Ahmedabad Congress, 1922: President, Satara Dist. Swaraj Party. President, 1st Maharashtra Lawyers' Conference, Poona, 1928; President, Prov. Postal and R. M. S. Conference, Sessions 1928. *Publications:* Note on Land Revenue Code and Note on Agricultural Associations in 1905. *Address:* Shanwar Peth, Satara City.

KARAULI, H. H. MAHARAJA DHIRAJ SIR BHANWAR PAL, DEO BAHADUR, YADUKUL CHANDRA BHAL, G.C.I.E., K.C.I.E, *b.* 24 July 1864. *Educ.:* Mayo Coll., Ajmer *s.* 1886. *Address:* Karauli, Rajputana.

KASIMBAZAR, MAHARAJA SIR MANINDRA CHANDRA NANDY OF, K.C.I.E., Bengal, *b*

1860. Vice-President: Bengal Landholders, Association and British Indian Association. *Educ.* Hindu School; sometime Member, Bengal Legislative Council, Imperial Legislative Council, Council of State and Chairman of Berhampore Municipality for six terms; Chairman, District Board Murshidabad. Hon. Fellow, Calcutta University and Life Member, Hindu University Benares; Patron of several clubs Associations and Institutions in Bengal. Belongs to Moderate School of Politics, takes a keen interest in and is a patron of education, industries, Agriculture, literature and politics. *Publications:* Upasana, B. S. Panjika, The Indian Medical Plant, A History of Indian Philosophy, Great Baishanab Gramthas, Part 10 of Sreemat Bhagbat, Fundamental Unity of India, History of Indian Shipping and Maritime Activity, Heir-apparent Maharajkumar Sris Chandra Nandy, M.A., M.L.C., Chairman, Berhampore Municipality. *Address* Rajbari, Kasimbazar, Bengal; or 302, Upper Circular Road, Calcutta.

KASTURBHAI LALBHAI, SHETH, Millowner; *b.* 22 Dec. 1894. *m.* Srimati Sardaben, *d.* of Mr. Chimanlal Vadilal Zaveri of Ahmedabad. *Educ.:* at Gujrat College, Ahmedabad, Hon. Secretary, Ahmedabad Famine Relief Committee 1918-19; elected Vice-President, Ahmedabad Millowners' Association, 1923-26, elected member, Legislative Assembly as a representative of the Millowners' Association (1923–26), Nominated Member to the Ahmedabad Muncipality for its current term. *Address:* Pankore's Naka, Ahmedabad.

KAY, SIR JOSEPH ASPDEN, KT. (1927), J.P., Managing Director, W. H. Brady & Co., Ltd., *b.* 20 Jan. 1884. *Educ.:* at Bolton, Lancashire. Came to India to represent firm 1907; Managing Director and Chairman of Board of the several companies under their control; Chairman, Bombay Millowners' Association, 1921 and 1922; Employers' Delegate to International Labour Conference, 1923; Officer in Bombay Light Horse; Vice-President Chamber of Commerce, 1925, President, Chamber of Commerce, 1926, and Vice-President, Indian Central Cotton Committee, 1925-26; Chairman, Back Bay Enquiry Committee, 1926. Chairman, Prohibition (Finance) Committee. (Bombay), 1926. *Address:* Wilderness, Cottage, Nepean Sea Road, Bombay.

KAZI SYED, HIFAZAT ALI, B.A., LL.B. *b.* 1892. *Educ.* Jubbulpore, Aligarh and Allahabad. Elected President, Municipal Committee, Khandwa, 1920. Minister for Local Self-Government, Public Works, Public Health, etc., Central Provinces. *Address*: Imlipora, Khandwa.

KEALY, EDWARD HERBERT, C.I.E. (1926) I.C.S., A.G.G., Western India *b.* 1873, *m.* 1905 Tempe, *d.* of Sir Charles Bayley, G.C.I.E., K.C.S.I., *Educ.* Felsted and University College, Oxford. Entered I.C.S., 1897, Bengal, 1897-1902. Joined Political Dept. Govt. of India, March 1902. Served in Rajputana, Central India, Ajmer-Merwara, N.W. F. P. F.A.A.G.G. Central India, 1904-05 ;Assist. Sec., Govt. of India, Foreign and Political Dept., 1905; Census Superintendent Rajputana and Ajmer. Merwara, 1910-13; Secretary N.W.F.P. 1915-20; Offg. Resident, Gwalior, 1922; Resident, Baroda, June 1923, March 1927; offg. A.G.G., Central India, March-October 1927; A.G.G., Western India, October 1927. *Publications:* Revised Aitchinson's Treaties (1909) and Census Reports on Rajputana and Ajmer-Merwara (1913). *Address:* The Residency, Rajkot.

KEANE, MICHAEL, C.I.E. (1921) *b.* 1873; *m.* Joyce Lovett Thomas, *Educ.:* School, Clongowes Wood, and Univ. Coll., Dublin, Entered I.C.S., 1898. Has been Under-Secy. to Govt., on deputation under the Govt. of India for settlement work in the Tonk and Sirohi States in Rajputana; District Officer in Agra and Cawnpore, Judicial Sec. to Govt., Chief Secy. to Govt. and President, U. P. Legislative Council 1921-25. *Address*: Lucknow.

KEELING, SIR HUGH TROWBRIDGE, KT. (1923) C.S.I., 1915, A.M.I.C.E., Ch. Eng., and Sec. to Ch. Commr., Delhi, since 1912; Mem. of Delhi Imp. Commn., 1913; Mem., Institute Engineers. (Ind.) *b.* 14 April 1885. *Educ.:* Marlbrough and Cooper's Hill; *m.* Edith, *d.* of Col. T. O. Underwood, late 4th Punjab Cavalry. Asst. Eng., Madras P. W. D., 1887; Exec. Eng., 1898. Superintending Eng., 1910. *Address:* P. W. D., Delhi.

KEEN, LIEUT.-COLONEL WILLIAM JOHN, C.I.E., (1916), C.B.E. (1920), Pol. Dept., Government of India. Officiating Chief Commissioner, N.W.F.P. (1926). *b.* 24 March, 1873; *m.* 1899, Marion Beatrice, *d.* of Col. A. McL. Mills, 37th Dogras; two *s.* two *d. Educ.*: Haileybury College, R. M. C., Sandhurst. Gaz. to R. Welsh Fus., 1892; Trans. to I. A. 37th Dogras, 1894; served Chitral Re. Exp., 1895; Joined Punjab Commn., 1898; Pol. Dept., Govt. of India, 1901; serving in N. W. Fron. Prov.; served Kabul Khel Exp., 1902; Mohmand Exp., 1908; Great War, 1914-18; Afghan War, 1919. *Address:* Revenue Commissioner, Peshawar, N. W. F. P.

KEILY, HENRY GERALD, V.D., J.P., Hon. Col., G. I. P. Ry. Regiment, A. F. I.; Chief Transportation Superintendent, G. I. P. Ry. *b.* February 3, 1874. *Educ:* Stonyhurst College Lancashire. Apptd. Assistant Loco. Supdt. Indian Midland Rly., Feb. 1896; transferred on amalgamation to the G. I. P. Ry. in 1901. Appointed to act as Chief Transportation Supdt. from 22nd March 1927.

KELKAR, NARSINHA CHINTAMAN, B.A., LL.B. (1894); M.L.A., Editor, *Kesari*, Poona. *b.* 24 Aug. 1872. *m.* Durgabai, *d.* of Moropant Pendse. *Educ.:* Miraj, Poona, Bombay Dist. Court Pleader till 1896; editor, *Mahratta*, Poona, from 1897 to 1919; editor, *Kesari*, from 1897 to 1899 and again from 1910; Municipal Councillor from 1898 to 1924; President, Poona City Municipality in 1918 and again from 1922 to 1924; President, Bombay Provincial Conference 1920; Delegate and member of Congress. Home Rule League deputation to England in 1919; elected member of the Legislative Assembly in 1923. *Publications:* Books in Marathi: 6 dramas, 1 historical treatise, 1 treatise on Wit and Humour, Biographies of Ba

Gangadhar Tilak and Garibaldi, History of Ireland in English: Case for Indian Home Rule, Landmarks of Lokmanya's life; and "A Passing Phase of Politics." *Address*: 554, Sadashiv Peth, Poona City.

KEMP, THE HON. MR. JUSTICE NORMAN WRIGHT, Bar-at-Law (Inner Temple); Judge of the High Court, Bombay. *b.* 29 October 1874. *Educ.*: the Collegiate, Edinburgh and Inner Temple. Chief Presidency Magistrate, Bombay, Chief Judge of Small Causes Court, Bombay; Addl. Judicial Commissioner, Sind. War Service, 1927. *Address*: High Court, Bombay.

KENNEDY-MINARDS, MAJOR WILLIAM IVEY, B. Sc., A.I.M.M.E., A.M.I. Chem., E. London. Assay Master, H.M. Mint, Bombay. *b.* 20 Oct. 1887, Polperro, Cornwall. *m.* 1916, Lilian Vesta, *y.d.* of late J. W. Richards of Abberkenfig, Glam, Wales. *Educ.*: The Truro Grammar School and Redruth School of Mines, Cornwall. Arrived India 1st June 1918 from Malta. Commissioned 2nd-Lt. R.G.A. 1914, retired from Army, April 1920. Joined Mint Service, Jan. 1920 as Dy. Assay Master and confirmed Assay Master, April 1922. *Address*: His Majesty's Assay Office, H.M. Mint, Bombay.

KER, JAMES CAMPBELL, C.S.I. (1928); C.I.E. (1924); B.A. (Cantab.), M.A. (Glas.); I.C.S., *b.* 1878. *m.* to Mary Katherine, *y. d.* of William Brown of Rhuallan Giffnock, Renfrewshire. *Educ*: Irvine Academy; Glasgow University; Caius College, Cambridge, Entered I.C.S. 1901; Personal Assistant to the Director of Criminal Intelligence, 1907; on special duty in A.H.Q., Simla, 1914-17; Collector and District Magistrate of Kaira, 1918; Secretary to Government of Bombay, General and Educational Departments, 1920-23. Private Secretary to the Governor of Bombay, 1924-1929. *Address*: Government House, Bombay.

KHAN, SHAFAAT AHMAD, B.A., First Class Honours in History 1914, Litt. D., 1919, Trinity College, Dublin; University Professor of Modern Indian History, Allahabad University; *b.* February 1893. *m.* Fahmeeda, *y. d.* of the late Justice Shah Din of the Punjab High Court. *Educ.*: Government High School, Moradabad; Sidney Sussex College, Cambridge; Trinity College, Dublin; and the University of London. Lecturer to the London County Council, 1917-1919; Member, United Provinces Legislative Council from Moradabad, U.P., since 1924. Gave evidence before the Reforms Enquiry Committee, 1924; the Economic Enquiry Committee in 1925, and other Committees in United Provinces. President of the Provincial Muhammodan Educational Conference, held at Allahabad in 1925. Chairman, Conference of Muslim members of Legis. Council and local bodies, Allahabad, February 1928; Chairman of the Committee for the Demands of U.P. Muslim; organised the agitation against boycott of the Simon Commission and prepared with the help of other Muslim M.L.C.'s an exhaustive momrandum for the Commission; went to England in 1927 as delegate of U. P. Muslim M.L.C.'s and lectured at Oxford, Cambridge, Bristol and London on their behalf. *Publications*: Founder and Editor, till 1925, of the Journal of Indian History, published "Anglo-Portuguese Negotiation relating to Bombay, 1667-1673" in 1923, East India Trade in the Seventeenth Century, 1924, Sources for the "History of British, India in the Seventeenth Century", 1926; "Johna Marshall in India, 1668-1672," What are the Rights of Muslim Minority in India? (1928). *Address*: University of Allahabad, Allahabad.

KHAPARDE, GANESH SHRIKRISHNA, B.A (1877), LL.B. (1884). Advocate and Member of Council of State *b.* 1955 *m.* Laxmi Bai *Educ.*: in Berar and Bombay. Extra Asstt. Commissioner in Berar from 1885 to 1889; returned to the Bar, Vice-Chairman of the Local Municipality and Chairman of the District Board of nearly 17 years. Member of Viceroy's Legislative Council; Member of the Council of State; re-elected in 1925 *Address*: Amraoti Berar, C. P.

KHWAJA MUHUMMAD NUR, THE HON. KHAN BAHADUR, B.A., LL.B., President, Bihar and Orissa Legislative Council. *b.* 28 Sept. 1878. *Educ.*: Gaya Zillah School, Doveton Coll., Calcutta; Ripon Coll., Calcutta. Practised as lawyer from 1904 to 1922. President, Legis. Council, Bihar and Orissa, from 1922. *Address*: Gurja (Bihar and Orissa).

KING, CHARLES MONTAGUE C.S.I. (1922). C.I.E., Financial Commsr., Punjab, 1922; *Educ.*: St. Paul's School, Balliol Coll., Oxford. Ent. I.C.S., 1892. Depy. Commsr., 1901; Commissioner, 1917; Dy. Commsr., Punjab, 1901-22. *Address*: Lahore.

KIRKPATRICK, LIEUT.-GENERAL SIR GEORGE MACAULAY, K.C.B. (1918); K.C.S.I., (1917); G.O.C. in Chief, Western Command. *b.* 23 August, 1866. *m.* Mary Lydia, *d.* of J. F. Dennistorm, K.C., R.M.C., Kingston, Canada. *Educ*: Haileybury. Joined Royal Engineers, 1885; Inspector-General, Australian Military Forces. Chief of General Staff, India, 1916-1920; G.O.C. China Command, 1920-1922.

KIRKE-SMITH, ARTHUR, M.A. (Cambridge), Solicitor to Government, Public Prosecutor. Master of the Hounds. *b.* 20th August 1878. *Educ.* Charterhouse, Trinity College, Cambridge. Articled to Freshfields Solicitor, London and admitted a Solicitor in 1903. *Address*: Bombay.

KIRPALANI, HIRANAND KHUSHIRAM, I.C-S., M.A. (Bom.), B.A. (Oxon.), Bar-at-Law (Lincoln's Inn), Collector of Kolaba since Jan. 1928-1912; *b.* 28 Jan. 1888. *m.* to Guli H. Gidvani. *Educ*: N. H. Academy, Hyderabad (Sind), D. J. Sind College, Karachi and Merton Coll., Oxford. Asstt. Collr. and Magte., Ahmedabad, Broach and Surat, 1912-1918. Municipal Commsr., Surat, 1918 to 1920. Taluqdari Settlement Officer, Guzerat, 1921. Dy. Municipal Commissioner, Bombay, 1921; Collr. and Dist. Magte., Kaira, 1923-24; Dy. Secretary to Government; Rev. Deptt., 1924-26, Ag. Municipal Commissioner for the City of Bombay 1926. *Address.* Alibag.

KISCH, BARTHOLD SCHLESINGER, B.A. (Oxford), C.I.E. (1926); I.C.S., District and Sessions Judge, United Provinces; Controller, Local Clearing Office (Enemy Debts) and Administra-

tor of Austrian and Hungarian Property in India; Secretary to Joint Committee of the House of Lords and House of Commons to inquire into the Organisation and Methods of the Central Prisoners of War Committee, 1917, attached to Legislative Department, Government of India. *b.* 25 Oct. 1882. *m.* Magdeleine Louise Claire Bernard-Antony. *Educ.*: St. Paul's School, London and Exeter College, Oxford. *Address :* Delhi and Simla.

KISHENGARH, H. H MAHARAJA ADHIRAJ MAHARAJA MADANSINGH BAHADUR, K.C.S.I., K.C.I.E.; *b.* Nov. 1884; *s.* father, late Maharaja Sir Sardul Singh Bahadur, G.C.I.E.; *cr.* 1892; *m.* 2nd *d.* of present Chief of Udaipur; served European War, 1914-15. *Address:* Kishengarh, Rajputana.

KISHUN PERSHAD, RAJA-I-RAJAYAN MAHARAJA BAHADUR, YAMINHUS-SALTANATH SIR, G.C.I.E., K.C.I.E. *cr.* 1903, G.C.I.E., *cr.* 1810. Hereditary Paishkar and President of the State Executive Council, Hyderabad State. *b.* 28 Jan. 1864. *Educ:* Nizam's College, Paishkar and Military Minister, 1893-1901, Prime Minister, 1901-1912. President of Executive Council since Nov. 1926 under the present constitution. *Publications*: Copious in Urdu and Persian prose and poetry. Descended from the great Hyderabad Statesman Maharaja Chandoo Lal. Heir : Raja Khaja Pershad. *Address :* City Palace, Hyderabad.

KOLHAPUR, LT. COL. HIS HIGHNESS SIR SHRI RAJARAM CHHATRAPATI, MAHARAJA OF, since 1922; G.C.I.E.(1924). *b.* 30 July 1897; *e. s.* of Col. Sir Shahu Chhatrapati Maharaja of Kolhapur (d. 1922); direct descendant of Shivaji the Great, the Founder of the Maratha Empire. *m.* 1918 H. H. Shrimati Tarabai Saheb, *g. d.* of H. H. Sir Sayajirao Maharaj Gaekwar, Ruler of Baroda. *m.* again to Her Highness Shri Vijayamala Maharani Saheb in June 1925. *Educ.*: Privately in Kolhapur; Hendon School; studied agriculture at Ewing Christian College, Allahabad. Hon. Lieut. Colonelship in the Indian Army was conferred in April 1927. *Address :* Kolhapur.

KOLLENGODE, RAJA SIR V. VASUDEVA RAJA, VALIA NAMBIDI OF, KT. (1925), C.I.E. (1915), F.M.U. (1921); Landholder. *b.* Oct. 1873. *m.* to C. Kalyani Amma, *d.* of Mr. K. Rama Menon, Chief Justice of Travancore. *Educ.*: Rajah's High School, Kollengode, and Victoria College, Palghat, Senior member and manager of the aristocratic family of Venganad in Malabar; twice nominated as member of Madras Legislative Council, afterwards elected Member, Madras Legislative Council, representing landholders; Member, Council of State (1922). Temp. Member, Madras Executive Council, from Nov. 1923 to April 1924. *Address :* Kollengode, Malabar Dist.

KOTAH, H. H. LIEUT.-COLONEL SIR UMED SINGH BAHADUR, MAHARAO OF, G.C.S.I., G.C.I.E., G.B.E., K.C.S.I., Hon. Lt.-Col, in Army; Hon. Major, 42nd Deoli Regt. *b.* 1873. *s.* 1889. *Address:* Kotah, Rajputana.

KOTLA, RAJA BAHADUR KUSHAL PAL SINGH OF, M.A. (Cal.); LL.B. (All.), M.L.C. *b.* 15 Dec. 1872. Succeeded to Kotla estate, 1905; Member, U. P. Legis. Council since 1909 Member, Imperial Legis. Council, 1913-16; Member, Legis. Assembly, 1921-23; Special Magte.; Chairman, Agra Dist. Board; Trustee and Mem. of Managing Committee of Agra Coll.; Member of Governing Body of Cawnpore Agricultural College; Member of the Senate of Agra University. *Address :* Gwalior House, Agra.

KRISHNAMACHARYA, RAO BAHADUR VANGAL THIRUVENGADA, B. A., B.L., C. I. E. (1926), Dewan of Baroda. *b.* 1881. *m.* Sri Rangammal. *Educ:* Presidency Coll., Madras and Law Coll., Madras, Entered Madras Civil Service by a competitive examination in 1903; served in several districts: 1908-1911 Chief Revenue Officer, Cochin State; also Offg. Diwan for some time 1913-1919; served in Madras as Asstt. Secry., Board of Revenue, Under-Secry. to Govt., Special Officer for Southborough Committeee, etc.; 1919-1922 Trustee, Vizianagaram Estate; 1923-1924 Collector of Ramnad; April 1924 to Feb. 1927 Secretary to the Govt. of Madras in Law, Education and other Departments. Joined as Diwan of Baroda, February 1927, services being lent to the Durbar, *Address:* Dilaram, Baroda.

KSHAUNISH CHANDRA RAY, THE HON. MAHARAJA BAHADUR, of Nadia (Bengal) Maharaja created 1912, Delhi Durbar; Maharaja Bahadur created 1917; Member, Bengal Executive Council in charge of Revenue, Irrigation, L. S. G. Medical, Public Health, *b.* 29 Oct. 1890. *m.* Jyotirmoyi Debi, youngest *d.* of late Raja Ashutosh Nath Roy of Kashimbazaar (Dist. Murshidabad). *Educ.*: Privately. Only son of late Maharaja Kshitis Chandra Roy Bahadur of Nadia, succeeded 1910; 2 *d.* Was elected a Member of the first reformed Bengal Legislative Council from the Non-Mahomedan constituency of Nadia, 1920-23; Member, Bengal Executive Council since 1st August 1924; First elected non-official Chairman of Nadia District Board, 1920-24; President, Nadia Landholders Association. *Address:* The Palace, Krishnagar; "Nadia House," 2, Bright Street, Ballygunge, Calcutta.

KUTCH, H. H. MAHARAJA (MAHARAO) DHIRAJ MIRZAN MAHARAO SHRI KHENGARJI SAWAI BAHADUR OF, G.C.S.I., G.C.I.E., *b.* 23rd August 1866. *m.* 1884. Represented India Imperial Conference, 1921; received Freedom City of London, 1921. Undertook to give £3,000 monthly for support of Indian Regiment during European War, 1915; represented India, League of Nations, 1921; received Freedom of the City of Bath, 1921. *Address*: The Palace, Bhuj, Kutch.

LAHORE, BISHOP OF, since 1913, RT. REV. HENRY BICKERSTETH DURRANT, M.A., D.D., C.B.E. *Educ.*: Highgate Sch.; Pembroke Coll., Camb. Ch. Miss. Coll., Islington. Curate of St. Matthew's, East Stonehouse, 1894-95; C.M.S. Missionary, Lucknow, 1896; St. John's Coll., Agra, 1897. Vice-Prin., 1900; Prin., 1911; Fellow, Allahabad Univ., 1906; served European War, Mesopotamia (Kut-el-Amara), 1915 (Despatches), 1918 (Despatches). *Address :* Bishopsbourne, Lahore.

LAKHMIDAS ROWJEE TAIRSEE, B.A., Land lord and Merchant. *m.* Ladkabai L. R. Tairsee. *Educ.:* St. Xavier's College, Bombay. Trustee, Tilak Swaraj Fund; Member, Bombay Municipal Corporation and its Standing Committee; representative, Bombay Municipal Corporation on the Improvement Trust Committee; representative of the Indian Merchants' Chamber on the Board of the Bombay Port Trust, and President, P. J. Hindu Gymkhana, Vice-President, Indian Merchants, Chamber, *Publications:* "Frenzied "Finance" speeches and Writing's of B. G. Horniman. "Priests, Parasites and Plagues." *Address:* 29-31-33, Bora Bazar Street, Fort; and 9A, Walkeshwar Road, Malabar Hill, Bombay.

LAKHTAR, CHIEF OF, THAKORE SAHEB BALVIRSINHJI KARANSINGHJI, *b.* 11 Jan. 1881. Succeeded father 8 Aug. 1924. *Address:* Lakhtar, Kathiawar Agency, Bombay.

LAKSHMI NARAYAN LAL, RAI SAHIB, son of Munshi Dyal Narayan Lal, Pleader and Zemindar. *b.* 1870. *m.* to Srimati Navarani Kuuwer. *Educ.* at Aurangabad, Gaya and Patna. Passed pleadership examination in 1890 and since practising as a pleader at Aurangabad and Gaya in the Province of Bihar and Orissa. Was Hon. Organiser of Co-operative Societies; Director and Chairman of the Central Bank, Aurangabad, ex-Chairman of the Local Board, Aurangabad; ex-Chairman of the Divisional Co-operative Federation, Patna; ex-Councillor of the Co-operative Federation, Bihar and Orissa, a nominated member of the first Legislative Assembly, and Member, National Convention; ex-Vice-President, Provincial Hindu Sabha, Bihar and Orissa and ex-President, Propaganda Committee Kayestha Sabha, Bihar and Orissa. *Publications:* Glories of Indian Medicine, Sahyog, Samudrajatra, Twelve Main Points of Co-operation, Updesh Manjari and Charkha Mahatmya Hindu-Musalman Ekta, Sri Gitaratnawali and Sri Gandhi Gita and Proprietor and Editor, Grihastha Gaya. *Address:* Aurangabad Dist., Gaya, Bihar and Orissa.

LAL, RAO BAHADUR BAKSHI SOHAN, M.L.A. (non-Mahomedan Constituency, Jullundur Divn.), Vakil, H. Ct., Lahore. *b.* 4 April 1857. Practised as Vakil in Kangra, Jullundur and Lahore. Elected Member, Punjab Leg. Council, 1912 and 1916. *Address:* High Court, Lahore.

LAL, PIYARE, Bar-at-Law, Member, Legislative Assembly. *b.* Jan. 1860. *Educ.:* Muir Central College, Allahabad. Called to the Bar in 1886; practised up to 1896; was Minister of Sailana State, 1896-1900; Chief Justice and latterly Judicial Member, Council of State, Indore, from 1900 to 1906; travelled round the world in 1913. Chairman, Reception Committee of the U. P. Political Conference, 1914; Special Magistrate, First Class, from 1915-1926; President, Cantonments Conference, 1923, at Rawalpindi. *Address:* Meerut.

LALKAKA, JEHANGIR ARDESHIR, Artist. *b.* 3 March 1884. Grandson of Khan Bahadur Sir Nowrojee Pestonji, Vakil, C.I.E., of Ahmedabad. *m.* Miss Tehmi Jamsetji Kharas of Bandra. *Educ:* Ahmedabad High School; Elphinstone Coll., Bombay; Sir J. J. School of Art, Bombay and St. John's Wood and Westminster Schools of Art, London. Painted Life size memorial portrait of Sir Pherozesha M. Mehta for Municipal Corpn., Bombay, unveiled by H.E. Sir George Lloyd; Sir D.E. Wacha's portrait in the Bombay Univ., Dr. Dadabhoy Nowroji's portrait and Principal A. L. Covernton's portrait for Elphinstone Coll., Sir Nowrojee Pestonjee Vakil's portrait for Nowrojee Hall, Ahmedabad; and H.H. the Nawab of Rampur's life size portrait for Durbar Hall, Rampur. Member of the Government of Bombay Board of Examiners for Art Examinations, 1918-1928. *Address:* 22, Babulnath Road, Bombay; The "Studio," Sea Face, Chowpaty, Bombay.

LALUBHAI SAMALDAS, SIR, KT. (1926), J.P C.I.E.(1914). *b.* October 1863. *m.* Satyavati, *d.* of Bhimrao Bolanath Divatia of Ahmedabad. *Educ.:* Bhavnagar High School and Elphinstone College. Under-Secretary to His Highness the Maharaja of Bhavnagar, and Revenue Commissioner, Bhavnagar. Resigned service in 1899 and entered business at Bombay as Guaranteed Broker to Gysi Klynanjung. Helped in starting the Bombay Central Co-operative Bank, Bank of Baroda, Indian Cement Company, Director in commercial firms and banks. Nominated to the Bombay Legislative Council in 1910, 1013, and 1916.

LAMBERT, GEORGE BANCROFT, B.A. (Oxon.) C.S.I. (1922); Finance Member, U. P., (Acting Governor for four months). *b.* 28th October 1873. *m.* Anne, *d.* of Rev. Rutland Spooner. *Educ.:* Magdalen Coll., Oxford. Various appointments in U.P. *Address:* Lucknow.

LANGLEY, GEORGE HARRY, M.A., Vice-Chancellor, Dacca University, since January 1, 1926; *b.* 14 July 1881; *s.* of Leveson and Matilda Emma Langley; *m.* 1913, Evelin Mary Biggart, Armagh, *Educ:* The University, Reading; Scholar in Logic and Psychology, London University, 1906, M.A. in Philosophy with special mark of distinction. University of London 1909, Indian Educational Service, 1913; Professor, Presidency College, Calcutta, 1913; Professor of Philosophy, Dacca College, 1913; Professor of Philosophy and Provost of Dacca Hall, University of Dacca, 1921-25; Acting Vice-Chancellor, Dacca University, July to September 1925. *Publications:* Articles on Mind; Proceedings of Aristotelian Society; Hibbert Journal; Monist; Quest; Dacca University Bulletin; Indian Philosophical Review; Indian Journal of Philosophy, etc. *Address:* Ramna, Dacca, E. Bengal.

LATIF, CAMRUDIN AMIRUDIN ABDUL, B.A.; late Mem. of Sec. of State's Adv. Comm. for Ind. Students; *b.* Cambay, 28 Sept. 1856. *Educ.:* Elphinstone Coll., Bombay; Bombay Univ.; practised as Vakil of Consular Courts, Zanzibar and Mombassa, 1880-93; Legal Adviser to successive Sultans of Zanzibar. Fellow, Bombay Univ.; J.P., Bombay; Hereditary Inamdar, Cambay State. *Address:* 1, Harvey Road, Chowpati, Bombay.

LATTHE, RAO BAHADUR ANNA BABAJI, M.A. LL.B. (Bombay), Dewan of Kolhapur. *b.* 1878;

m to Jyotsnabai Kadre of Kolhapur. *Educ.* Deccan College, Poona; Prof. of English. Rajaram College, Kolhapur, 1907-1911; Educational Inspector, Kolhapur, till 1914; President, Southern Mahratta Jain Association and Karnatak Non-Brahman League; Edited "*Deccan Ryot* (1918-20)" Member of the Indian Legislative Assembly, 1921-23; Member of the University Reform Committee, 1924. *Publications:* "Introduction to Jainism" (English): "Growth of British Empire in India" (Marâthi); "Memoirs of Shahu Chhatrapati" and "Shri Shahu Chhatrapatiche Charitra" in Marathi (1925). *Address:* Kolhapur.

LEFTWICH, CHARLES GERRANS, C.B.E. (1919). Indian Trades Agent, East Africa, *b.* 31 July 1872. *m.* Evadne Fawcus of Alnmouth, Northumberland. *Educ.:* Christ's Hospital and St. John's College, Cantab. Entered I.C.S. 1896. Served in C. P. *Address:* Mombassa.

LEGGE, FRANCIS CECIL, C.B.E., V. D. (1919), Director of Wagon Interchange, Indian Railway Conference Assocn. *b.* 14 September 1873. *Educ.:* Sherborne School. *Address:* Bengal Club, Calcutta.

LESLIE, BRADFORD, LIEUT.-COL. SIR ,KT., O.B.E. (Military, 1917), M.Inst. C.E.,M.I.E.E., Chairman and Chief Engineer, Madras Port Trust, *b.* 1868. *m.* Edith Stewart. *Educ.* Marlborough. On B. N. N. for 12 years, retiring as Deputy Agent and Chief Engineer to join Firm of Sir John Wolfe Barry and Brunel, Consulting Engineers, Westminster. Lt.-Col. R. E. Northern France 1916 to 1919. Chairman and Chief Engineer, Madras Port Trust since 1921. *Address:* Harbour House, Madras.

LESLIE-JONES, FREDERICK ARCHIBALD, M.A., C.B.E., Principal of Mayo College. *b.* 1874. *m.* Christiana Mary Baskett. *Educ.:* Bromsgrove and Lincoln College, Oxford. Assistant and House Master, Marlborough College, 1897-1904; Princ. Aitchison College, Lahore, 1904-1917. *Publication:* A View of English History. *Address:* Mayo College, Ajmere.

LEY, ARTHUR HERBERT, B.A., C.S.I. (1926), C.I.E. (1918), C.B.E. (1924), Member, Public Services Commission, India. *b.* 7 Nov. 1879. *Educ.* Winchester College and New College, Oxford. Entered I.C.S. 1903. Under-Secretary, Government of Bengal, 1908; Under-Secretary, Govt. of India, 1909-12; Director-General of Commercial Intelligence, 1914-16; Dy. Secretary, Commerce Department, 1915-18; Secretary, Commerce Department, 1919; Chief Controller, Surplus Stores, 1921-23; Secretary, Department of Industries 1923-1926. *Address:* Delhi and Simla.

NDSAY, SIR DARCY, KT. (1925), C.B.E., 1919, Kaisar-i-Hind Gold Medal (1911). M.L.A., *b.* Nov. 1865. Late Secretary, Calcutta Branch, Royal Insurance Co. *Address:* 26, Dalhousie Square, Calcutta.

LINDSAY, HARRY ALEXANDER FANSHAWE, I.E. C.B.E., I.C.S., Indian Trade Commissioner, London. *b.* 11 March 1881; *m.* Kathleen Louise Huntington. *Educ.* St. Paul's School, London; Worcester College, Oxford. *Address:* Bengal Club, Calcutta, and Oriental Club, London.

LITTLEHAILES, RICHARD, M.A. (Oxon.), C.I.E. Offg. Educational Commissioner with Government of India, 1925. *b.* 14 February 1878. *Educ.:* Balliol Coll., Oxford and Kiel University. Demonstrator and Lecturer, Clarendon Laboratory, Oxford. Joined I.E.S. 1903 as Prof. of Mathematics, Presidency College, Madras. Director of Public Instruction, Madras, 1919. *Address:* Delhi and Simla.

LLOYD, ALAN HUBERT, B.A. (Cantab.), C.I.E., I.C.S., Member, Central Board of Revenue. *b.* August 30, 1883. *m.* Violet Mary, *d.* of the late J. C. Orrock. *Educ.:* King William's College, Isle of Man, Gonville & Cains College, Cambridge. Appointed to Indian Civil Service, Burma, 1907; Member; Central Board of Revenue since 1923. *Address:* Delhi and Simla.

LOHARU, THE HON. NAWAB SIR AMIR-UD-DIN AHMED KHAN BAHADUR, K.C.I.E., Member, Council of State, and Persian and Urdu Poet. *b.* 1860, *S.* 1884. Ruling Chief of Moghal tribe, Abdicated in favour of his Heir-apparent and Successor in 1920, voluntarily retaining titles and 9 guns salute as personal distinctions. For two years Mem. of Imp. Leg. Council and for two years Mem. of Punjab Council, again a member of Council of State for 3 years, Superintendent and Advisor to the Malerkotla State in the Punjab for 12 years. Attached to Pol. Dept. in Mesopotamia. After death of his son the Ruling Nawab he is now Nawab Regent during the minority of his grandson the Nawab of Loharu. *Address:* Loharu, Hissar.

LORT-WILLIAMS, HON. MR. JUSTICE, JOHN ROLLESTON, K.C. (1922), Puisne Judge, High Court, Calcutta. *b.* 14 September 1881. *m.* 1923, Dorothy Margery Mary, *o. c.* of late Edward Russell, The Hermitage, Hampstead. *Educ:* Merchant Taylors; London University; Tancred student, 1902, Barrister, Lincoln's Inn, 1904, Member, Inner and Middle Temple; Recorder of West Bromwich 1923 and of Walsall 1924-28. President, Hardwicke Society, 1911; Contested (U) Pembrokeshire, 1906 and 1908; Stockport, December 1910. (Co. U.) M. P. Rotherhithe 1918-1922; (U) 1923 Member of the Oxford Circuit. Served six years in Middlessex Imperial Yeomanry; Member of the L. C. C. (Limehouse), 1907-10; Vice-Chairman of Housing Committee; Appointed, Judge, Calcutta High Court, 1927. *Address:* High Court, Calcutta.

LOW, FRANCIS, Assistant Editor. *The Times of India. b.* 19 November 1893 *m.* Margaret Helen Adams, *Educ:* Robert Gordon's College, Aberdeen. Joined staff *Aberdeen Free Press,* 1911. Served in War with Mesopotamian

Expeditionary Force. Special Service Officer, Intelligence, G. H. Q. 1919. Gazetted out with rank of Captain 1920. Chief Reporter, *Aberdeen Free Press*, 1920. Sub-Editor, *The Times of India*, 1922; Asst. Editor, 1927. *Address*: 7, Pedder Road, Bombay.

LOYD, RT. REV, P. H. *see* Nasik, Bishop of.

LUNAWADA, HIS HIGHNESS MAHARANA SIR SHRI WAKHATSINHJI DALELSINHJI, RAJAH OF, K.C.I.E.; *b.* 11 Aug. 1860; *S.* 1867; a Virpura Solunki Rajput; *Educ.*: Rajkumar Col., Rajkot Uvaraj Shree Naharsinhji *alias* Natwar Sinhji, heir-apparent, Salute 11 guns as personal distinction. *Address*: Lunawada, Rewa Kantha, Bombay.

LYALL, FRANK FREDERICK, C.I.E., I.C.E. (retd.) General Manager, Kasim Bazaar Raj, *b.* 12 June 1872. *Educ.*: Edinburgh Academy. Balliol Coll., Oxford. Ent. I.C.S., 1891; *m.* Miss I. K. Markham (1906); Ministry of Munitions, London, 1915-1918; Committee 1919; retired 1926. *Address*: 17, Alipore Park, Calcutta.

LYLE, THOMAS-ELDERRY, B.E., A.R.C. Sc.I., C. P. C. (1928), T. S. C., Executive Engineer in charge of Sarda Canal Headworks Construction. *b.* 24 May 1886. *m.* Mary Stewart Forsyth. *Educ.*: St. Andrew's College, Dublin, Royal College of Science, Ireland and Queen College, Belfast and Royal University of Ireland (Graduated 1908, First Place with First Class Honours). Assistant on Main Drainage Construction under London County Council 1908-09; apptd. Asst. Engineer in P.W.D. (Irrigation), U.P. India in 1909; employed in various large constructive works, including Ganga Dam on Ken River in C.I.; in charge of construction of Ghaghar Canal Reservoir and Karamnasa Feeder cut and headworks; Executive Engineer in charge of Design and Construction of Sarda Canal Barrage and head portion of Sarda Canal including the Jagbura Syphon (the largest syphon in the world) and other cross drainage works. War service in Waziristan and in Persian and in the 3rd Afghan War. Mentioned in Despatches by G.O.C., Bushire Field Force in 1918-19 (South Persia). *Address*: Executive Engineer, Sarda Canal, Bareilly U.P.

McCARRISON, LIEUT.-COLONEL ROBERT I.M.S., M.D., D.Sc., Hon. LL.D., F.R.C.P. (London); Foreign Associate Fellow College of Physicians (Philadelphia); Laureate Academy of Medicine, Paris; Kaiser-i-Hind (1st Class), 1911; C.I.E. (1923); In charge, Deficiency Diseases Inquiry, Indian Research Fund Association, Pasteur Institute, Coonoor. *b.* 15 March 1878; *m.* Helen Stella, 3rd *d.* of the late J. L. Johnston, I.C.S., Judicial Commissioner, Sind. *Educ.*: Queen's College, Belfast. Graduated M.B., Bch., B.A.O. (1st Class Hons. and Exhibition) (1900); M.D. (Hons.) 1900; M.R.C.P. (Lond), 1909; D.Sc. (Belfast) 1911; F.R.C.P. (Lond.) 1914; Entered I.M.S., 1901; Milroy Lecturer, College of Physicians, London, 1913; Mellon Lecturer, University of Pittsburgh, U.S.A., 1921; Mary Scott Newbold Lecturer, C. P. Philadelphia, 1921; Hanna Lecturer, Cleveland, Ohio, U.S.A., 1921; Mayo Foundation Lecturer, Rochester, Min. U.S.A. 1921; Arnott Memorial Gold Medalist. Irish Medical Schools and Graduates Association 1921; Prix Amussat Academy of Medicine, Paris (1914); Laureate of the Academy of Medicine, Paris (1914); Stewart Prize for Research, British Medical Association (1918), Foreign Associate Fellow, College of Physicians of Philadelphia (1922); Hon. LL.D., Queen's University, Belfast, 1919; Silver Medalist, Royal Society of Arts, 1925; Brevet-Lt.-Colonel (1918) "for distinguished Service in the Field," *Publications*: "Endemic Goitre" London, 1913; The Thyroid-Gland in Health and Disease," London, 1917; "Studies in Deficiency Disease," London, 1921; "The Simple Goitres," London, 1928; "Food," Madras, 1928. Numerous scientific papers on the Physiology and pathology of the thyroid and parathyroid glands; and on disorders of Nutrition in Proc., Roy Soc., Proc. Royal Soc., Med, Indian Journal Medical Research, etc. *Address*: Pasteur Institute, Coonoor, South India.

MAC GLASHAN, JOHN, M. Inst. C. E., M.I.E (Ind.), Chief Engineer, Calcutta Port Commissioners: *b.* 24 Sep. 1874; *m.* Grace Isabel Fraser. Represented India on Council of The Institution of Civil Engineers, 1922-25; Member of Council of the Institution of Engineers (India); Viceroy's Prize for Engineering Paper in 1927; Chairman, Bengal Association of Engineers, 1927. *Publications*: "Lectures on Harbour and Dock Engineering at the Port of Calcutta." *Educ.*: Aberdeen. *Address*: Port Commissioner's Office, Calcutta.

MACKENNA, SIR JAMES, KT., C.I.E., I.C.S., Development Commissioner, Burma, *b.* Aug. 1872. *Educ*: Dumfries Academy; Edinburgh Univ., Balliol Coll., Oxford. Ent. I.C.S., 1894; Dir. of Agriculture, Burma, 1906; President, Indian Cotton Committee, 1917; President, Indian Sugar Committee, 1919; Member, Royal Commission on Agriculture in India, 1926. *Publication*: Agriculture in India. *Address*: Rangoon.

MACKISON, JAMES WALLS, B.Sc. (Edin.) M. Inst. C.E., J.P., C.I.E. (1921); Special Engineer, Development Works, to Bombay Municipality since 1920. *b.* 18 Dec. 1869. *Educ.*: Dundee Institution, St. Andrew's University and Edinburgh University; Civil Engineer with Dundee Municipality from 1886 to 1906; Consulting Engineer in private practice, 1906-11; Executive Engineer, Bombay Municipality, 1911-1920. *Address*: "The Grange," Wodehouse Road, Bombay.

MACMULLEN, MAJOR-GENERAL CYRIL NORMAN, C.B., C.M.G., D.S.O., General Officer Commanding Rawalpindi Dist. *b.* 1877. Served N.W. Frontier 1897-98 (medal and clasp); Tibet expedition, 1903-4 (medal); European War 1914-19 (despatches, C.M.G., D.S.O., Brevet Lt.-Col., Legion of Honour, Order of Crown of Belgium, Croix de Guerre); Afghan War, 1919; Army Headquarters, India, 1924-27; G. O. C. Rawalpindi District, 1927. *Address*: Rawalpindi.

MACPHAIL, THE REV. EARLE MONTEITH, M.A., B.D., Hon. D.D. (Edn.), 1922 ; C.B.E. (1919); C.I.E. (1924) ; *b.* Jan. 31, 1861 ; *m.* Mary, elder *d.* of late James Meliss Stuart of Eriska, Argyllshire. *Educ:* Edinburgh Academy, Edinburgh University, New College, Edinburgh, Jena, Tübingen and Berlin Universities. Ordained Missionary of Free Church of Scotland, 1890 ; became Prof. of Hist. and Economics, Madras Christian College, 1890 ; Fellow of Madras University, 1899 ; Mem. of the Syndicate of Madras University, 1906 ; Representative of Madras University on the Madras Legislative Council, 1909 and 1919 ; Chairman, Madras Publicity Board, 1918 ; Principal, Christian College, Madras, 1921 ; Member, Madras Legislative Council, 1921-22. Vice-Chancellor of the Madras University (1923-25) ; Member, Council of State (1924) ; Chairman of the Inter-University Board of India (1925) ; Representative of the Madras European Constituency in the Legislative Assembly of India, (192527). *Address :* Madras Club, Madras ; Benderloch Kodaikanal, South India.

MACTAGGART, COLONEL CHARLES, C.S.I. 1919, C.I.E.; Inspector-General of Civil Hospitals, U.P. ; *b.* 1861. *Educ.:* Campbelltown Gram. Sch. Glasgow Univ., Ent. I.M.S., 1886 ; Insp.-Gen. of Prisons, 1902. Mem., Indian Factory Labour Commission, 1907-08 ; Mem. of U. P. Leg. Council, 1909 *Address :* Lucknow.

McCARTHY-JONES, CHRISTOPHER HOWELL, M.I.E.E., M.I.MECH.E., M. I.P.T., Director and General Manager, The Indian Radio Telegraph Co., Ltd., *b.* 26 Jan. 1876. *m.* Rosalie Desiree. *Educ :* University College School London, Central Technical College, South Kensington. Engineer to Lake Cepais Co., Ltd., Greece, 1900-02 ; Engineer, British Thomson-Houston Co., Rugby, 1902-09 ; Manager and Engineer in India for General Electric Co., New York, 1909-14 ; and B. T. H. Co. Consulting Electrical Engineer, 1918-25. *Publications :* The Electrification of the Burma Oil Fields, Overhead Transmission Series, etc., etc. *Address :* Radio House, 34–38, Apollo Bunder, Bombay.

McKENZIE, THE REV. JOHN, M.A. (Aberdeen) 1904; Senior Cunningham Fellow, New College, Edinburgh, 1908 ; Principal, Wilson College, Bombay. *b.* 13 June 1883. *m.* Agnes Ferguson Dinnes. *Educ.:* Aberdeen University, New College, Edinburgh ; Tubingen University. Ordained 1908 ; Appointed Professor in Wilson College, 1908 ; Appointed Principal, 1921 : Fellow of the University of Bombay, President, Bombay Christian Council, 1924-26. President, Bombay Anthropological Society, 1927. *Publications :* Hindu Ethics (Oxford Univ. Press). *Address :* Wilson College House, Bombay.

McWATTERS, ARTHUR CECIL, C.I.E. (1918); I.C.S., Secretary to the Govt. of India, Industries and Labour Dept., (1926). Member of the Council of State. *b.* 13 September 1880 ; *m.* Mary, only *d.* of Sir Stephen Finney, C.I.E.; one *s.* one *d.* *Educ.:* Clifton, Trinity College, Oxford; 1st Class, Classical Moderation, 1st Class, Lit. Hum. Joined I.C.S., 1904 Served in the U. P.; Under-Sec., Government of India, Department of Commerce and Industry, 1910-13. Wheat Commissioner, 1915. Controller of Hides and Wool, 1917; Chairman, Board of Special Referees, Excess Profits Duty Act, 1919 ; Secretary to Government of India ; Secretariat Procedure Committee, 1919 ; Represented Govt. of India on Commercial Mission to Persia, 1920 ; Controller of Currency, 1920-23. Secretary to the Govt. of India, Finance Department, 1923-26. Ag. Member of the Governor-General's Council, Oct. to Dec. 1927 and April to October 1928. *Address :* The Secretariat, Delhi or Simla.

MADAN, MEHERJIBHAI PALANJI, J. P. and Hon. Presidency Magistrate and Journalist, *b.* 14th September 1860. *m.* Bachubai Dadabhai Kuka. *Educ.:* Sir J. J. Benevolent Institution and Sir Jamshedji Jeejeebhoy Madressa as well as Mulla Feeroz Madressa. Began in 1877 as Reporter and Sub-Editor of the *Bombay Samachar* and by degrees rose to the Editorship of the same about the year 1898. In 1915 joined the newly started *Praja Mitra* and the *Parsee* as its first Editor and in 1925 started a new paper the *Satya Mitra*. *Publications* : Many small tracts on Zoroastrianism among them "Fravashi," "Ahunavar" and "Khætwadath" especially noted, published translations of the Avesta from the French of Baron De Harlez and "Aogemadaecha" from the German of Dr. Gieger ; also contributed for some years to le Museon, the famous Oriental Journal by the University of Louvain. *Address :* Serene Villa, Alexandra Road, New Gamdevi, Bombay.

MADGAVKAR, THE HON. MR. GOVIND DINANATH, B.A., I.C.S., Judge, High Court, *b.* 21 May 1871. *m.* Miss Bhadrabai Pandit. *Educ :* St. Xavier's High School, St. Xavier's College, Elphinstone College, and Balliol. Passed the I.C.S. in 1892 ; served in Burma for 3 years ; became Dist. and Sessions Judge in 1905 ; Additional Judicial Commissioner (Karachi), 1920 ; Judge, High Court, 1925. *Address :* "Crismill," Land's End Road, Malabar Hill, Bombay.

MADHAVA RAO, V. P., C.I.E., (1899) *b.* Feb. 1850. *Educ* : Government College, Kumbakonam (B.A. 1869, Fellow 1899). For 35 years in the service of Mysore State in important capacities being Member of Council of Regency, 1898-1902 ; Inspector-General of Police, the first Indian to be entrusted with that responsible charge, 1892 ; Plague Commissioner, 1898. Member, Executive Council and Rev. Commsr., 1902-1904 ; Dewan of Travancore, 1904-1906 ; Dewan of Mysore, 1906-1909 ; toured all over India to gain first hand information on the condition of India ; Presided at Tanjore Dist. Confce., Dewan of Baroda, 1914-16 ; President, 23rd Madras Provincial Confce. at Cuddalore, 1917 ; has also presided over a number of conferences (political, social, industrial, etc.); went to England on deputation by the Indian National Congress ; tendered evidence before Parliamentary Joint Committee; President, First Karnatak Confce., Dharwar, 1920 ; now lives in retirement ; awarded Kaiser-i-Hind Gold Medal in the first year of its inception, 1900. *Address* : "Patan Bhavan," Bangalore.

MADHAVLAL, SIR CHINUBHAI, BT., see Runchorelal.

MADRAS, BISHOP OF, since 1923, Rt. Rev. Edward Harry Mansfield Waller, M.A. (Cantab.); *b.* 8 Dec. 1871. *Educ.:* Highgate Sch. Corpus Christi College, Cam. Ordained 1894; Principal, St. Paul's Divinity Sch., Allahabad, 1903. Principal, Jay Narayan's High School, 1907; Ag. Secretary, C.M.S., U.P., 1908-09. Sec., C.M.S., Indian Group, 1913; Canon of Lucknow, 1910-15; Bishop of Tinnevelly, 1915-1922. *Publications:* "Revelation" in Bishop's Commentaries for India and The Divinity of Jesus Christ, Translated to Madras, 1 Jan. 1923. *Address:* Sullivan's Gardens, Royapettah, Madras.

MAHABOOB ALI KHAN, MAHOMED AKBAR KHAN, M.L.C., First Class Sardar (1921). Cotton Commission Agent, Hubli. *b.* 1878. *Educ.:* at Hubli. Started business in cotton in 1896, extended same from time to time, created a cotton market at Savanur by establishing Ginning and Pressing factories there; also started ginning factories at Ranebennur and Guttal convenient places for marketing cotton in the interior; is an advocate of improved methods and machinery for agriculture and himself a cultivator on a large scale, cultivating about 300 acres of land on improved lines and demonstrating its benefits to the other ryots of his place and neighbourhood; is President, Hubli Anjuman-i-Islam, working for the educational, social and material uplift of Mahomedans; is Vice-President of Hubli Municipality. *Publications:* Kanarese translation of Mr. G. F. Keatinge's "Rural Economy in the Bombay Deccan;" Kanarese translation of "Britain in India;" "Have we Benefited?" *Address:* Opposite Native General Library, Hubli, Dist. Dharwar.

MAHALANOBIS, S.C., B.Sc. (Edin.), F.R.S.E., I. E. S.; (retired) Prof. of Physiology, Carmichael Medical College, Calcutta, Presidency Coll., Calcutta, 1900-27. Fellow, Moderator and Syndic, Calcutta University, President, Board of Higher Studies in Physiology, Calcutta University. *b.* Calcutta, 1867; *m.* 1902 fourth *d.* of Keshub Chunder Sen and sister of H. H. the Maharani of Cooch-Behar. *Educ.:* Edinburgh Univ. *Publications:* Muscle Fat in Salmon; Life History of Salmon; New form of Myograph; Teachers' Manual; Text Book of Science. *Address:* 45, New Park Street, Calcutta.

MAHDI HUSAIN, KHAN WAHUD-UD-DAULA, AZOD-UL-MULK, NAWAB MIRZA KHAN BAHADUR, C.I.E.; *b.* 1834. *Educ.:* India; Arabia. Travelled extensively in Arabia, Persia, Afghanistan, Baluchistan, and Europe; visited Mecca, Medina, Kaymiani *Address:* Tirminigaz, Lucknow.

MAHOMED USMAN, THE HON KHAN BAHADUR SIR, B.A., Kaiser-i-Hind (2nd Class 1923) Member of the Executive Council, Madras. in 1884. *m. d.* of Shifa-ul-Mulk Zynulabid Sahib Bahadur, B.A. *Educ:* Madras Christian College. Councillor, Corporation of Madras, 1913-1925; Hon. Pres. Magte, 1916-20; Fellow of the Madras University; Member, Town Planning Trust, 1921-25; Chairman of Committee on Indigenous Systems of Medicine, 1921-23; Member, Publicity Board, 1918 and 1921-22; President, Muthialpet Muslim Anjuman, Madras; President, Board of Visitors to the Govt. Mahomedan Coll. and Hon. Visitor, Government School of Arts and Crafts, 1923-25; Member, Madras Excise Licensing Board, 1922-25; Gave evidence before the Reforms Committee and the Jail Committee. Elected Member, Madras Legis. Council, 1921-23; Sheriff of Madras (Decr. 1923); President of the Corporation of Madras, 1924. President, Madras Children's Aid Society; President, Madras Discharged Prisoners' Aid Society; Chairman, H. R. H. The Prince of Wales' Children's Hospital Fund; Chairman, the British Empire Leprosy Relief Association, Madras Branch; President, Board of Studies in Hebrew, Arabic, Persian, etc., of the University of Madras; President, Mahomedan Educational Association of Southern India. *Address:* Aziz Bagh, Graemes Road, Cathedral, P. O. Madras.

MAHMOOD SCHAMNAD, SAHEB BAHADUR, M.L.C. Landholder; Member, Legislative Councils Madras (elected) and Member, S. Kanara Dist. Board Elected Member S.K. Educational Dist Council. *b.* 7 March 1870; *m.* 1896 to Mrs. Maryam Schamnad *Educ:* St. Aloysius Coll., Mangalore and Christan Coll., Madras. Served on the South Kanara Dist. Board for about 15 years; Hon. Magte., since 1913; Pioneer of Moplah education is S. Canara. Started the Azizia Muslim Educational Association in South Kanara and Madras Moplah Amelioration Committee in 1922. Elected Member of the First and Second Legislative Assembly. Government awarded a Coronation Medal and a Certificate in recognition of his services on Local Boards and hisspecial interest in Moplah education; Presided at the 3rd Annual Confce. of all Kerala Muslim Aikya Sangham in 1925. Leader of the Govt. Deputation to the Andamans to investigate into the Moplah Colonization Scheme in 1925; Presided at the first district Muslim Educational Confce., S. Kanara in 1926. Member Mahomedan Religious Endowment Committee, Kasaragod. *Publication:*—The Moplah Wills Act 1928 (Madras). *Address:* Sea View, Kasaragod, S. Kanara.

MAHMUDABAD, MAHARAJA OF, SIR MOHAMMAD ALI MOHAMED KHAN, KHAN BAHADUR, K.C.S.I., K.C.I.E., Home Member, Executive Council of the U. P. Government, 1921; Hon. Secretary, Lucknow University Collection Committee; President, All-India Educational Conference; Vice-Chancellor of Aligarh Univ.; *b.* 1877. *Educ.:* privately. *Address:* Mahumudabad House, Kaiserbagh, Lucknow.

MAHOMEDALI, KHAN BAHADUR, NAWAB SYED, I.S.O.: Ent. Govt. Service, 1873; Insp.-Gen. of Registration, Bengal; retired, 1913; a distinguished Urdu scholar and dramatist; wrote The Nawabi-Darbar, and Adventures of Notorious Detective in English. *Address:* 4, Ballygunge, Calcutta.

MAJITHIA, THE HON. SARDAR BAHADUR SIR SUNDAR SINGH, KT. (1926) C.I.E. (1920); Ex. Revenue Member, Government of Punjab; *b.* 17th Feb. 1872; *m.* grand daughter of Sardar Sir Attar Singh, K.C.I.E., Chief of

Bahadur (Patiala State). *Educ.:* Punjab Chiefs College and Government College, Lahore. Worked as Hon. Secretary of the Khalsa Coll., Amritsar for 11 years and Hon. Secretary, Chief Khalsa Diwan, a representative body of the Sikhs from its inception in 1902 to the close of 1920. *Address*: "Majithia House," Albert Road, Amritsar (Punjab).

MAJUMDAR DWIJA DAS, M.SC., Assistant Controller of Stationery and Stamps, Government of India now Offg. Deputy Controller of Stationery and Stamps. *b.* 2nd Feb. 1890, *m.* Abhamayee, *d.* of late Promatha Nath Ghosh, Zemindar of Bhagalpur. *Educ.* Krishnagar Collegiate School, Krishnagar College, and Presidency College, Calcutta. Entered Bengal Junior Civil Service, 1915; Bengal Survey Office as Asstt. to the Officer in Charge, Bengal Traverse Party, 1917; Asstt. Controller of Stationery and Stamps, Govt. of India, 1924. Acted as Hon. Secretary, Bengal Junior Civil Service from 1921 to 1926. *Address*: P. 128/A, Ray Street, Elgin Road, Calcutta.

MALAVIYA, PANDIT KRISHNA KANT, Editor of *Abhyudaya*. *Educ.:* at Allahabad. *Publications:* Sansar Sankat, Sohaghke Manorama at Patna, and many others in Hindi. *Address*: Abhyudaya, Allahabad.

MALAVIYA PANDIT MADAN MOHAN, M.L.A. *b.* Allahabad, 25 Dec. 1861. *Educ.*: Sanskrit at the Dharma Jnanopadesh Pathshala, Govt. High School, Muir Central Coll., Allahabad; B.A. (Calcutta), Schoolmaster, 1885-87; edited the Indian Union, 1885-1887 and the Hindusthan, 1887-1889; LL.B., Allahabad Univ., 1892; Vakil, High Court, Allahabad, 1892; Member, Prov. Leg. Council, 1902-12; President of Indian National Congress, 1909 and 1918; Member, Imp. Leg. Council, 1910-1919; Member, Indian Industrial Commission, 1916-18; President, Sewa Samiti, Prayag; Chief Scout, Sewa Samiti Scouts' Association; Vice-Chancellor, Benares Hindu University since 1919; President, Hindu Mahasabha, 1923-24. Member, Legislative Assembly since 1924. *Address:* Benares Hindu University.

MALER KOTLA, HON. KHAN, SIR ZULFIGAR ALI KHAN, K.C.S.I., C.S.I.; estate holder in Maler Kotla State; Ch. Minister of Patiala State, since 1911; Elected member of the Council of State from 1921 to 1925; at present elected member in the Legislative Assembly representing East Central Punjab Muslims. *Publications*: has written many books including Lives of "Maharaja Ranjit Singh" and "Sher Shah, Emperor of India; also "The Poetry of Iqbal." *b.* 1875; *Educ:* Chiefs' Coll., Lahore; Cambridge; Paris. *Address:* Lahore.

MALIK FIROZKHAN NOON, M.A. (Oxon.) Minister, Punjab Government. *b.* 7 May 1893. *Educ:* Chiefs' College, Lahore and Wadham College, Oxford. Advocate at the Lahore High Court and Member of the Punjab Legislative Council from 1921. Appointed Minister for Local Self-Government, January 1927. *Address*: 17, Lawrence Road, Lahore; Woodville, Simla E.

MALIK MOHAMMED UMAR HAYAT KHAN (TIWANA), COLONEL, THE HON. NAWAB, SIR, K.C.I.E., C.B.E., M.V.O.; Member of Council of State, 1921; *b.* 1875. *Educ.:* Chiefs' Coll., Lahore. One of largest landholders in Punjab. Attache to H. M. the Amir, 1907; Deputy Herald, Delhi Durbar, 1911; Member of Imperial Council, 1910-1921. *Address:* Kalra, Shahpur.

MALLIK, DEVENDRA NATH, B.A. (Cantab.) Sc. D. (Dub.), F.R.S.E.; Principal, Carmichael College, Rangpur, Bengal since 1926; *b.* Bengal 1866. *Educ.:* St. Xavier's Coll., Calcutta; Univ. Coll., London; Peterhouse Cambridge. *Publications:* Numerous works on Mathematics and Physics. *Address*: Rangpur, Bengal.

MANDI, LT. HIS HIGHNESS RAJA JOGINDER SEN BAHADUR OF *b.* 19th Aug. 1904 *m.* to only *d.* of H. H. the Maharaja of Kapurthala. Son and heir Prince Yashodhan Singh (*b.* 7 Dec. 1924). *Educ.:* Aitchison College, Lahore. Ascended the *gadi* in 1913; accompanied by Her Highness visited some of the important countries in 1924; again travelled to Europe and the Near East in February 1927, returning to India in October of the same year; was invested with full ruling powers in Feb. 1925. *Address*: The Palace, Mandi State, Punjab.

MANIPUR, H. H. MAHARAJA CHURA CHAND SINGH, C.B.E.; *b.* 1886; *m.* March 17, 1905. *Educ.:* Mayo College, Ajmer. *s.* 1891. State has area of 8,000 sq. miles, and a population of 384,016. Salute 11 guns. *Address:* Imphal Manipur State, Assam.

MANOHAR LAL, M.A. (Punjab); B.A. (Double First Class Honours), Cambridge, Philosophy and Economics, Bar-at-Law; Minister of Education, Punjab Government. *b.* 31 Dec. 1879. *Educ:* Punjab University, and St. John's College, Cambridge. McMahon Law student, St. John's Cambridge, Brotherton Sanskrit scholar, Cambridge, Cobden Prize, Cambridge, Whewell scholar in international Law 1904, 1905; Principal, Randhir College, Kapurthala 1906-1909; Minto Professor of Economics, Calcutta University. 1909-1912; practised as Barrister, High Court, Lahore, 1913-1926. *Publications:* articles on economic subjects. *Address:* Fane Road, Lahore.

MANSINGH, SARDAR, B.A., LL.B. Advocate, High Court, Vice-President, The Chief Khalsa Diwan. (1923-1925); *b.* 1887. *Educ.:* Khalsa College, Amritsar, won Gold Medal for writing Punjabi poetry. Practised as Vakil for a period of about sixteen years: edited Khalsa Young Men's Magazine from 1905 to 1909. Member, Legislative Assembly (1921-23). Secretary, Reception Committee XVII Sikh Educational Confce., Lahore, held in 1926; Hon. Secretary, Khalsa High School. *Publications:* Translated Kalidasa's Vikramorvashi from Sanskrit into Punjabi poetry and prose, has written religious tracts. *Address:* Lahore.

MANSINGHJI, *see* JHALA.

MARJORIBANKS, SIR NORMAN EDWARD, K.C.I.E. (1928), C. S. I. (1922); C. I. E. (1919). Member of the Executive Council Madras (1925) *b.* 16 Oct. 1872; *m.* Barbara, *d.* of the late Edward Watson H. M's Inland Revenue Service

Educ: at Royal Academical Institution, Belfast; Queen's Coll., Belfast; and Trinity Hall Cambridge. Emtered I.C.S., 1893; Asstt.Collr. and Magte. until 1896; Under-Secretary to Govt., 1897-1903; Dy. Director and Director of Land Records, 1904-1910; Collr. and Dt. Magte., 1911-1918; Member, Board of Revenue, and Chief Secretary to Government, 1919-1924. *Publications:* Report on Emigration (in collaboration with Sir Ahmed Thamby Maracair). *Address:* Adyar House, Adyar, Madras.

MARSHALL, SIR JOHN HUBERT, KT., *cr.* 1915, C.I.E., 1910; Litt. D., M.A., Ph.D., F.S.A. Hon. A.R.I.B.A., Commander of the Order of Leopold. Vice-President of the India Society; Director-General of Archæology in India since 1902; *b.* Chester, 19 March 1876; *m.* 1902 Florence, *y. d.* of Sir Henry Longhurst, C.V.O. *Educ.:* Dulwich King's College, Cambridge (Scholar and Hon. fellow) Craven Travelling student; *Address:* Simla.

MARTEN, HON. SIR AMBERSON BARRINGTON, KT., (1924). LLD., M.A., Chief Justice, Bombay High Court, 1926. *b.* 8 Dec. 1870; *e. s.* of late Sir Alfred Marten, K.C., M. P. *m.* 1898 Lois *d.* of late W. Tarn of Lancaster Gate W. *Educ:* Eton; Trinity. College, Cambridge (1st Class Law Tripos) Studentship Council of Legal Education, 1895. called to Bar, Inner Temple, 1895: Mem. of Bar Council, 1909-10; practised in Chancery Division till 1916, Puisne Judge, Bombay High Court, 1916-1926. *Address:* High Court Bombay.

MARTIN, JAMES REA, B.A., C.I.E. (1927). I.C.S., Bar-at-Law, Chief Secretary to Government of Bombay, Political Department; *b.* 2nd Aug. 1877, *m.* France, Lilly Elsie Webb. *Educ:* Methodist College and Queen's College, Belfast, Assistant Collector; Manager, Sind Incumbered Estate; Deputy Commissioner Upper Sind Frontier; Collector of Karachi and Surat; Deputy Director of Development. Secretary to Government of Bombay, Development Department and Commissioner, Bombay Suburban Division. Ag. Home Member of Council, Bombay Government 1928. *Address:* Lands' End House, Malabar Hill, Bombay.

MARZBAN, PHEROZESHAH JEHANGIR, M.A., J.P., M.L.C., Editor, *Jam-e-Jamshed*, *b.* 6 May 1876. *m.* Rattanbai, *d.* of the late Mr. Edulji N. Sethna. *Educ:* Bharda New High School and Elphinstone College, Bombay. A Journalist for over 27 years, an author, novelist, a dramatist. Member of the Corporation for 12 years; Member, Municipal Standing Committee; Hon.Presidency Magtte. and editor of a daily vernacular for the last 25 years. *Publications:* Fifteen volumes of fiction and comic writings, 5 dramas and Miscellaneous writings. *Address:* "Shalemar," Hughes Road, Bombay.

MASANI, RUSTOM PESTONJI, M.A., J. P., Kaiser-i-Hind Silver Medal; *b.* 23 Sept. 1876; *m.* 9 Decr. 1902, Manijeh P. Wadia, *Educ:* New H. S. and Elphinstone Coll,: Fellow, Elphinstone College, 1897 and 1898; Jt. Proprietor. and Editor of *Gup Sup* (1898); Editor of English columns of *Kaisar-i-Hind* (1891-1900); Editor, *Indian Spectator* (1901-02); Trustee, N. M. Wadia Charities; Jt. Hon. Secry., Society for the Protection of Children in W. India; also of the K. R. Kama Memorial Institute and the Parsi Girls' Schools Association and Trustee; Secretary, Bombay Food Prices Committee (1914-17) Municipal Secretary, 1907-1919. Dy. Municipal Commissioner (1919-22). Manager, Central Bank of India, Ltd. (resigned 1929). *Publications:* English: Child Protection, Folklore of Wells; The Law and Procedure of the Municipal Corporation, Bombay; The Conference of the Birds, a Sufi Allegory. Gujarati: *Dolatno Upayog* (use of Wealth); *Charni, tatha nishalni kelvni* (Home and School education), *Tansukh mala* (Health series), and novels named *Abyssiniano Hobshi; Bodhlu; Chandra Chal. Address:* Versova (*via* Andheri Station).

MASOOD, SYED ROSS, NAWAB MASOOD JUNG BAHADUR, Director of Public Instruction, Hyderabad (Deccan). *b.* 1889. *Educ.:* M.A.O. College, Alligarh, and New College, Oxford. Bar-at-law; Imperial Education Service; Headmaster, Patna School, 1913. Senior Prof. of History, Ravenshaw College, Cuttack, 1916; Formerly Fellow of the University of Calcutta; Fellow of the Madras University: Member, Council of the Osmania University; Member, Court of the Muslim University; Aligarh. *Publications:* "Japan and its Educational System." *Address:* Hyderabad, Deccan.

MATHER, RICHARD, B.Met., M.I.E. (India) Metallurgical Inspector, Government of India. *b.* 19 Sept. 1886. *Educ.:* Royal Grammar School, Sheffield, Univ. of Sheffield. Mappin Medallist 1906; Metallurgist, Ormesby Iron Works, Middlesborough, 1907-1911, Dy. Dir. Metallurgical Research, War Office, Woolwich, 1911-1919; Member of Govt. Commission to investigate German and Luxemburg steel industry, 1919; Technical Adviser, Indian Tariff Board, 1923-24. Member of Iron and Steel Institute, Inst. of Metals, Faraday Society, Technical Inspection Institute. *Publications:* Papers for technical societies. *Address:* Tatanagar, B. N. Ry.

MATTHAI, JOHN, B.A., B.L. (Madras); B. Litt. (Oxon.); D. Sc. (London); Member, Indian Tariff Board, *b.* 10 Jan. 1886. *m.* Achamma John 1921. *Educ.:* Madras Christian College, London, School of Economics; Balliol College, Oxford. High Court Vakil, Madras, 1910-14; Officer on special duty, Co-operative Department, Madras 1918-20; Professor of Economics, Presidency College, Madras, 1920-25; Professor of Indian Economics, University of Madras, 1922-25; Member, Madras Legislative Council 1922-25; Member, Indian Tariff Board since 1925. *Publications:* Village Government in British India; Agricultural Co-operation in India; Excise and Liquor Control. *Address:* Tariff Board, 1, Council House Street, Calcutta.

MAULA BAKHSH, NAWAB MAULA BAKHSH KHAN BAHADUR, C.I.E. of Batala, Punjab, India, Foreign and Political Department, Government of India; *b.* 7 May 1862; *m.* 2nd daughter of Haji Mirza Abbas Khan, C.M.G., C.I.E., British Agent, Khurasan, Persia; Four *s*, five *d.* Joined Punjab Postal

Dept., 1880, Manager Dead Letter Office, and Postal Stock Depot, Karachi, 1881; joined Imperial Circle, Public Works Dept., Simla, 1882. Services placed at disposal of Foreign and Political Dept., 1887., on special duty North-Eastern Persia, 1887-1888; Attache, Hashtadan Perso-Afghan Boundary Commission, 1888-89; Attache to Agent to Governor-General and H. B. M's Consul-General, Meshed 1894; Britsh Vice-Consul. Khurasan and Seistan, 1896-90; on Special Political duty in Kain, Seistan and Baluchistan, 1898; on special duty in Intelligence Branch, Quarter-Master-General's Dept., Simla, for revising Gazetteer of Persia, 1898-99; Asst. Dist. Supdt. of Police in charge. Nushki District, Baluchistan, 1900; Extra Asstt. Commissioner and Magistrate, Punjab 1900-1; Personal Assistant to Chief Commissioner, Baluchistan 1901-2; Seistan Boundary Commission, 1902-4, Oriental Secretary, Kabul Political Mission, 1904-05; Attache, Foreign and Political Dept. Government of India, 1905-19, Chief Indian Political officer with H. M. Amir Habibullah Khan of Afghanistan during H. M'.s Indian tour, 1906-7; Political Officer, North West Afghan Frontier Field Force, 1919; Secretary, Indo-Afghan Peace Conference, Rawalpindi, 1919. Home Minister, Jammu and Kashmir State, 1919-22; Member, Jammu and Kashmir State Council 1922, 23; Chief Minister, Bahawalpur State 1925-28; *Address :*— Woodlands, Simla, E; Iram, Srinagar, Kashmir.

MAUNG KUN, B.A., Bar-at-Law and Member Legis. Assembly. *b.* 27 Aug. 1891. *m.* Ma Aye. *Educ.:* Govt. High School, Bassein, Burma, The Rangoon College, Rangoon, and Gray's Inn., London, Assistant Registrar, Chief Court of Lower Burma at Rangoon from 1918-1920 when resigned and started practice at the Bar. *Address:* Danubyn, Burma.

MAUNG TOK KYI, B.A., Member, Legislative Assembly and Director, The Sun Press Ltd., Rangoon. *b.* 1884. *Educ.:* Rangoon College. Member of the Subordinate Civil Service, Burma, from 1908 to 1920; resigned Govt. service and joined editorial staff of *The Sun* in 1920; became Managing Director 1921; elected to the Municipal Corporation, Rangoon, 1922; elected Member, Leg. Assembly, 1923 and elected to Rangoon University Council, 1924. Founded Burma Swaraj Party and elected its leader, 1925. Re-elected Member, Legislative Assembly, 1926. *Address :* 41, 51st Street, Rangoon.

MAW, WILLIAM NAWTON, C.I.E., I.C.S., Commissioner, Nerbudda Division, C.P., since April 1923. *b.* 1 Aug. 1869; *m.* 1898, Una Agnes Brook-Meares, *d.* of Col. G. Brook-Meares; Com., Royal Irish Fusiliers. *Educ.:* Wesley Coll., Sheffield: St. John's Coll., Cambridge (B.A.). Ent. I.C.S., 1893. In C. P. Secretariat, 1906-12; Dy. Commissioner, Jubbulpore, 1913-16. Served as Commissioner in the Jubbulpore, Nagpur and Nerbudda Divisions of C.P. and in Berar, 1916-23. *Address:* Hoshangabad, C.P.

MAWNG, SIR SAO, K.C.I.E., K.S.M., SAWBWA OF YAWNGHWE, Member of Federal Council of Shan Chiefs. *Address* Yawnghwe, Shan States, Burma.

MAYNE, JONATHAN WEBSTER CORYTON, C.I.E. (1922), M.A. (Oxford), Guardian to H. H. the Maharaja of Jaipur. *b.* 26 April 1868. *m.* Margery Howel Scratton. *Educ.:* The Wells House, Malvern Wells, Tonbridge School, Keble College, Oxford. Studied at Leipzig Univ., 1890-1891; Assistant Master, Brighton Coll., 1891-1898. Nominated to I.E.S., 1898; from then till 1903 held posts of Headmaster, Karachi and Poona Government High Schools, Educational Inspector (Acting), Central and Northern Divisions, Bombay Presidency, from February 1903 to January 1923. Principal, Rajkumar College, Rajkot. *Publications*: Newspaper articles in the *Times of India* under nom-de-plume "Oxon," occasional poems and some songs (in England) Histories of some Indian States. *Address :* Rambagh, Jaipur, Rajputana.

MEARS, THE HON. SIR GRIMWOOD, KT. (1917), K.C.I.E., (1928) and Kt. of Order of Crown Belgium, Chief Justice, Allahabad, 1919, *Educ.:* Exeter College, Oxford. Barrister, 1895; Hon. Sec. to Bryce Committee on German Outrages, 1914-15; Hon. Sec. to R. Com. on rebellion in Ireland, 1916; Sec. to the Dardanelles Commission, 1916-17; British Embassy, Washington, 1918-19; President, Bombay Back Bay Enquiry Committee, 1926. *Address*: Allahabad; 2 Hare Court Temple, E. C.

MEGAW, COLONEL JOHN WALLACE DICK, B.A., M.B., B. Ch. B.A. O. (R.U.I.), V.H.S. (1925), C.I.E. (1926). Inspector-General of Civil Hospitals, Punjab; Director and Professor of Tropical Medicine, Calcutta School of Tropical Medicine. *m.* Helen Esmee Ward. *Educ.* Royal Academical Institution, Belfast, and Queen's College, Belfast. Officiating Prof. of Pathology, Calcutta Medical College, Principal and Prof. of Pathology, King George's Medical College, Lucknow; and Editor, *Indian Medical Gazette. Publications :* Numerous articles on Malaria, Indian Tick Typhus, Epidemic Dropsy, Dengue, Cool Rooms, etc. *Address:* Office of Inspector-General of Civil Hospitals, Punjab.

MEHTA, KHAN BAHADUR SIR BEZONJI DADABHOY, KT. *Address:* Nagpur.

MEHTA, THE HON. SIR CHUNILAL VIJBHUCANDAS, Kt., K.C.S.I. (1928), M.A., LL.B., Provincial Scout Commissioner *b.* 12 Jan. 1881. *m.* to Tarabai Chandulal Kankodiwala. *Educ.*: St. Xavier's College, Bombay; Captain, Hindu XI; elected to the Bombay Municipal Corporation in 1907 ; Chairman, Standing Committee, 1912; President of the Corporation, 1916; Elected to the Bombay Legislative Council by the Corporation in 1916; elected to the City Improvement Trust, 1918; Chairman of the Indian Merchants' Chamber, 1918. Elected to the Bombay Port Trust, 1920; Millowner and Director, Tata Iron and Steel Co.; Bombay Electric Supply and Tramways Co., and several other joint stock companies; Minister, Bombay Government, 1921-23. Member of the Executive Council of the Bombay Government 1923-28. *Address* 108, Ridge Road, Malabar Hill, Bombay

MEHTA, DHANJIBHAI HORMASJI, L. M. & S. Kaiser-i-Hind Gold Medal (1920); Donat of St. John Silver Medal (1917); Raj Ratna Silver Medal, Baroda (1916); Retired Sanitary Commissioner, Baroda. *b.* 4 Feb. 1864, *m.* to a cousin. *Educ.:* Sir Cowasji Jehangir Naosari Zarthosti Madressa and the Grant Medical College, Bombay. Joined Baroda Med. Service, 1887; did Inoculation work with Prof. Haffkine; gave evidence on the value of inoculation before 1st Plague Commission. Has popularised St. John's Ambulance work and Red Cross Work all over Gujrat, Sind, Kathiawad, Central India and Central Provinces, Punjab and N.W.F. Province enrolled over 2,150 members, and published 38 books on Ambulance, Nursing Hygiene, Midwifery, Red Cross, etc. *Address*: Sayaji Ganj, Baroda.

MEHTA, FATEH LAL, Seretary to H. H. the Maharana of Udaipur. *s.* of late Rai Pannalal, C. I. E., Prime Minister of Udaipur. *b.* 1868. *Address*: Udaipur, Rajputana.

MEHTA, JAMSHED N. R., Merchant. *b.* 7th January 1886. *Educ.* at Karachi. Member of Municipality, 1914; President of Municipality, 1922; Asst. Provincial Commissioner of Scouts in Sind; and Chairman, Buyers and Shippers Chamber. *Publication*: Karachi Municipality, as at present and its future. *Address*: Bonus Road, Karachi.

MEHTA, JAYSUKHLAL KRISHNALAL, M.A., Secretary, Indian Merchants' Chamber, Bombay. *b.* 1884. *m.* to Mrs. Kumudagauri. *Educ.* Wadhwan High School and Gujarat and Elphinstone Colleges. Appointed Secretary, Indian Merchants' Chamber, 1907, Services borrowed by the Indian Munitions Board from Chamber and appointed Assistant Controller from September 1917 to November 1918; was nominated Adviser to the Representative of Employers for the third session of the International Labour Conference, Geneva, in 1921; after the Conference he toured about Europe and England for seeing the Chambers of Commerce and other commercial organisations there on behalf of the Indian Merchants' Chamber; has been working as Hon. Secretary of the Federation of the Indian Chambers of Commerce; Vice-President of the Bombay Suburban District Congress Committee since 1921 and President of the Bombay Suburban District Congress Committee since 1925. Was nominated Chairman of the Santa Cruz Notified Area Committee in June 1927. *Address:* "Krishna Kutir", Santa Cruz, B. B. & C. I. and "The Recluse," 31, Murzban Road, Fort, Bombay.

MEHTA, DR. JIVRAJ NARAYAN, L. M. & S. (Bom.). M.D., M.R.C.P. (Lond.), F.C.P.S. (Bom.) J. P. Dean, Gordhandas Sunderdas Medical Coll. and King Edward Memorial Hospital. *b.* 29 Aug. 1887. *m.* Miss Hansa Manubhai Mehta. *Educ.*: High School education at Amreli, Baroda State, Grant Medical Coll., Bombay, and London Hospital. Formerly Asst. Director, Hale Clinical Laboratory, London Hospital, London, and Chief Medical Officer, Baroda State. *Address*: Gordhandas Sunderdas Medical Coll., Parel, Bombay.

MEHTA, SIR MANUBHAI NANDSHANKAR, Kt., (1922), C.S.I. (1919), M.A., LL.B.; Prime Minister and Chief Councillor, Bikaner State. *b.* 22 July 1868; *Educ.*: Elphinstone Coll., Bombay. Professor of Logic and Philosophy and Law Lecturer, Baroda College, 1891-99. Priv. Sec. to Gaekwar, 1899-1906; Rev. Min. and First Counsellor, 1914-16. Diwan of Baroda 1916-1927, *Publications.* The Hind Rajasthan or Annals of Native States of India; Principles of Law of Evidence (in Gujarati) 3 Vols. *Address*: Bikaner.

MEHTA, ROOSTUMJEE DHUNJEEBHOY, J.P., C. I.E.; Merchant; Port Commissioner, 1888-91; Chairman, Local Board, Alipur, 1886-1917; Chairman, Manicktolla Municipality; Sheriff of Calcutta, 1893; Consul for Persia at Calcutta, 1899-1904; Presidency Magisrate. *Publications*: The Exchange Imbroglio; Indian Railway Economics; Indian Railway Policy, Indian Railway Management. *Address:* 9, Rainey Park, Ballygunge, Calcutta.

MEHTA, VAIKUNTH LALUBHAI, B.A., Managing Director, Bombay Provincial Co-operative Bank, Ltd. *b.* 23 Oct. 1891. *m.* Mangla, *d.* of Prataprai Vajeshanker of Bhavnagar. *Educ.* New High School, Bombay, Elphinstone College, Bombay, Winner of Ellis Scholarship for highest number of marks in English at the B.A. Examination. Worked with Central Famine Relief Committee and Servants of India Society for famine relief work, 1911-12; Hon. Manager, Bombay Central (Provincial) Co-operative Bank. Ltd., Bombay (1912-15) as Manager from 1915-1922, and Managing Director since 1922. Editor, Social Service Quarterly, since 1915; Bombay Co-operative Quarterly since 1916; one of the Promoters of Executive Committee; Member, Bombay Central (Provincial) Co-operative Institute, Bombay Joint Secretary, Social Service League, Bombay. *Publications*: The Co-operative, Movement (The Times Press) 1915; The Co-operative Movement in India (Servants of India Society pamphlet in collaboration with Mr. V. Venkata Subbaiya), Arya Bhusan Press, 1918. Studies in Co-operative Finance (Servants of India Society pamphlet), 1927. *Address.* Murzbanabad, Andheri, (B.B. & C. I. Railway.)

MESTON, REV. WILLIAM, M.A., D.D. Kaiser-i-Hind Medal, (First Class), 1921; Principal, Madras Christian College. *b.* 4 May 1871. *m.* Mary Innes Sinclair. *Educ.:* Grammar School, Aberdeen and University of Aberdeen; New College, Edinburgh and University of Edinburgh, St. John's College, Cambridge. Appointed to Staff of Madras Christian College, 1893: Member of Legislative Council (Madras), 1921-1923, 1927, 1928, *Publications:* Joint Author of "Our Madras Mission." Aspects of Indian Educational Policy. *Address*; College Park, Kilpauk, Madras.

MILLER, SIR DAWSON, KT., K.C., Ch. Justice of Patna High Court, since 1917; *b.* Dec. 1867. *Educ.:* Durham Sch. and Trinity Coll., Oxford: Bar, Inner Temple, 1891. *Address*: High Court, Patna.

MILLER, SIR LESLIE, KT. (1914), C.B.E. (1919). Chief Judge, Mysore, 1914-22. *b.* 28 June 1862. *m.* Margaret Lowry, O.B.E. *Educ.:* Charterhouse, and Trinity College, Dublin. Entered I.C.S., 1881. Judge of the Madras High Court, 1906-14. *Address*: Glen Morgan, Pykara, Nilgiri Hills.

MIRZA M. ISMAIL, AMIN-UL-MULK, B.A., (1905), C.I.E. (1924); O.B.E. (1923); Dewan of Mysore. *b.* 1883. *m.* Zebinda Begum of Shirazee family. *Educ:* The Roya School at Mysore, Central College, Bangalore, for B.A.; Superintendent of Police, 1905; Asstt. Secretary to H. H. the Maharaja, 1908; Huzur Secretary to H. H. the Maharaja, 1914; Private Secretary to H. H. the Maharaja, 1923; Dewan of Mysore, 1926. *Address:* Dewan of Mysore, Bangalore.

MISRA, PANDIT HARKARAN NATH, B.A., LL.B. (Cantab.); M.L.A. (1924); Bar.-at-Law (Inner Temple). *b.* 16 July 1890. *m.* Shrimati Bhag wan Devi of Cawnpore Dist. *Educ.:* Mui Central College, Allahabad and Gonville and Cains College, Cambridge (1911-1915). Joined Non-Co-operation Movement in 1920; Member of the All-India Congress Committee; Senior Vice-Chairman of Municipal Board, Lucknow. Joint Secretary, Oudh Bar Association; Member of the Bar Council of Chief Court of Oudh; Member of the Lucknow University Court. *Publications:* Asstt. Editor of Oudh Law Journal, Lucknow, from 1916-1920. *Address:* 5, Neill Road, Lucknow.

MISRA, PYARE LAL, Bar-at-Law, *b.* Aug. 17 1872. *Educ.:* Saugor, C. P. and Nagpur Hislop College; Gray's Inn, London. Was elected to the C. P. Council in 1917 and to the Legislative Assembly in 1920. Is Vice-President of the Municipality, Hon. Secry., Co-operative Bank; Member of the C. P. Board of Agriculture; First President of the Hindi Literary Conference held at Raipur; Mem., All-India Hindi Association. *Publications:* Hindu Law in Hindi, History of English Journals in Hindi, a small pamphlet in English criticising the Calcutta University Commission's Report during Lord Curzon's Viceroyalty. *Address:* Chhindwara, C.P.

MISRA, RAI BAHADUR PANDIT SHYAM BEHARI. M.A.; ex-member Council of State; Deputy Commissioner, Unao, U.P.; and Member of the Allahabad University Court and of the Academic and Executive Councils of Allahabad University; Member, Hindustani Academy, U. P. and its Executive Council. *b.* 12 August 1873. *m.* Miss B. D. Bajpai, has two *s.*, five *d.* *Educ.:* Jubilee High School and Canning College, Lucknow. Entered Executive Branch, U. P. Civil Service in 1897 as Deputy Collector; was on special duty in 1903, 1908, 1909 and 1921-22 in connection with consolidation of agricultural holdings on the last occasion; was Deputy Supdt., and Offg. Superintendent, Police (1906-09); on deputation as Dewan, Chhatarpur State, C. I. (1910-14); Personal Asstt. to Excise Commr., U. P. (1917-20); Dy. Commr., Gonda (1920-21) for over a year, besides having twice officiated as Magte. and Collr. of Bulandshahr for a few weeks; Jt. Registrar of Co-operative Societies, (1922-24); Registrar, Aug. 1924 to December 1926 and Dy. Commr., Uno, since April 1927. Confirmed as Magte. and Collector with effect from 27th March 1926. *Publications:* Several standard works in Hindi including the Misra-Bandhu Vinoda (a text-book for B.A. & M.A. Examinations) and the Hindi Nava Ratna (text-book in the Degree of Honours Examination). *Address:* Golaganj Lucknow.

MITCHELL, DAVID GEORGE, B.Sc. (Edin.), C.I.E. (2nd June 1923), Indian Civil Service. *b.* 31 March 1879. *m.* to Elizabeth Duncan Wharton. *Educ.:* George Heriots School, Edinburgh, Edinburgh University, Lincoln College, Oxford. Joined I.C.S., Oct. 1903. Divisional and Sessions Judge in Central Provinces, 1913, Legal Secretary and Legal Remembrancer to Government of C.P. and Secretary to C.P. Legislative Council, 1919. Officiated as Additional Judicial Commissioner, June 1926. Officiated as Joint Secretary, Govt. of India, Legislative Department, April 1927. *Address:* United Service Club, Simla.

MITRA, THE H'ON. SIR BHUPENDRA NATH, M.A.; K.C.S.I., (1928) K.C.I.E., (1924) C.B.E., (1919) Member of the Viceroy's Council (Industries and Labour). Dec. 1924. *b.* Oct. 1875. *Educ.:* Metropolitan Institution, Hare School and Presidency College, Calcutta. Held Ministerial appts. from 2nd April 1896; apptd. to enrolled list, Finance Dept., Jan. 1919; Asstt. Secry., Sept. 1910; on special duty in connection with Royal Commission on Indian Finance and Currency, June to September 1913; on deptn. as Controller of War Accounts from May 1915; O.B.E., Dec. 1917; Mil. Acctt.-General, Nov. 1919; offg. Financial Adviser, Mil. Fin. Branch, May 1920; confirmed May 1922; temp. Member of Governor-General's Council, April 1924; Confd. Dec. 1924; Temporary Finance Member, March to June 1925. *Address:* Delhi and Simla.

MITTER, SIR BINOD CHUNDER, KT. (1918) Barrister and Advocate, Calcutta. Member Council of State (1921). *b.* 1872. *m.* Miss Charushilla De. *Educ.:* Presidency College and Ripon College; became examiner for many years for Doctorate of Laws in Calcutta University; twice officiated for a year and a half as Advocate-General, Bengal; Vice-President, National Liberal League; Member of the Bengal Legislative Council, 1910-16; Standing Counsel to the Government of India, 1910-17, Member of Moderates Deputation to England, 1919. Chairman of Reception Committee of Moderates' Conference in Calcutta in 1919; was invited by the Punjab Government to serve on the Gurdwara Committee but declined. *Address:* 2-1, London Street, Calcutta.

MITTER, THE HON. SIR BROJENDRA LAL, M.A. B.L., Barrister-at-Law. Law Member, Government of India 1928 Formerly Advocate General of Bengal. *b.* May 1875. *m.* a daughter of Mr. P.N. Bose, late of the Geological Survey and *g. d.* of the late R. C. Dutt, I.C.S. *Educ.:* Presidency Coll., Calcutta and Lincoln's Inn. *Address:* 5, Outram Street, Calcutta and 78, Middle Road, Barrackpore.

MITTER, THE HON. MR. JUSTICE DWARKANATH, M.A., D.L.; Member, Council of State (1924); Advocate, High Court, Calcutta. *b.* 29 Feb. 1876. *m. d.* of Bala Charan Dutt of Calcutta. *Educ.:* Presidency College, Calcutta. Joined High Court Bar in 1897: Took his degree of Doctor of Laws in 1912 and since then had risen rapidly to the front rank of his profession and enjoyed

lucrative practice till the date of his elevation to the Bench in 1926. In 1916 elected an ordinary Fellow of Calcutta Univ. for five years and appointed Judge of the Calcutta High Court in November 1926. *Publications :* A Thesis on Position of Women in Hindu Law, published by Calcutta University. *Address :* 12, Theatre Road, Chowringhee, Calcutta.

MITTER, RAI BAHADUR KHAGENDRANATH, B.A. (Hons.); M.A. (Gold Medalist); *b.* 1880. *m.* Sneharama. *Educ. :* Presidency College, Calcutta. Nominated Member, Legislative Assembly, 1922 and 1923; Member, Council of State, 1924 and 1925; Fellow (elected), Calcutta University 1922 to 1926); late editor of Bangiva Sahitya Pazisat Patrika. Senior Professor of Philosophy, Presidency College, Calcutta. Inspector of Schools, Burdwan Division. Fellow, Calcutta University (1928). *Publications :* Author of several works in Bengali on History and Fiction. *Address :* 35, Beadon Row, Calcutta.

MITTER, SIR PROVASH CHANDRA, KT., *cr.* 1924, C.I.E. Vakil at High Court, Calcutta. *Address:* High Court, Calcutta.

MIYAN, ASJAD-ULLAH, MAULVI, M.L.A. Hon. Magte., Kishangunj, Zamindar of Mehergaon. *b.* 5 Jan. 1883. *m.* Bibi S. Nisa, *d* of late Moulvi Insaf Ali of Henria. *Educ.* at Mehengaon. Member, Dist. Board, Pur neah (Bihar); and Member, Local Board, Kishanganj; Vice-President, Anjuman-i-Islamia, Kishanganj. *Address :* Mehengaon, P. O. Kishanganj, Dist. Purneah, Bihar.

MOBERLY, ARTHUR NORMAN, C.I.E. (1924) Member, Bengal Executive Council. *b.* 20 Sept. 1873. *m.* Emily, *d.* of the late James Bowman. *Educ :* Winchester and Christ Church, Oxford. Indian Civil Service (1896). *Address* : C/o Lloyds Bank, Limited. Post Box 306, Calcutta.

MODI, JIVANJI JAMSHEDJI, SHAMS-UL-ULAMA (1893), C.I.E. (1917); Sec., Parsi Panchayat Bombay. *b.* 26 October 1854. *Educ.* Elphinstone High School, Elphinstone College *m.* Shirinbai, *d.* of the late H. N. Saklatwala Has published numerous historical and antiquarian works chiefly dealing with Parsihistory and religion. Is Ph. Doc. (Hon Heidelberg, and Officier de l'Instructio publique.) (France) Fellow, Bombay Univ. 1887. Received the Campbell Gold Medal Bombay Branch R. Asiatic Society, 1917 Fellow B. B. R. Asiatic Society, 1924 Vice-President, B.B. R. A. S., Hon. Secretary, Anthropological Society of Bombay for the last 28 years. Hon. Member, Bhandarkar Oriental Research Institute; (1923); Chevalier de Legion d'Honneur, (1925), Officer de Croix de Merit (Hungary), 1925; *Address* : 211, Pilot Bunder Road, Colaba. Bombay.

MODY, HORMUSJI PEROSHAW, M.A. (1904) LL.B. (1906); Advocate, High Court, Bombay: *b.* 23 Sept. 1881; *m.* Jerbai, *d.* of Kawasji Dadabhoy Dubash. *Educ.:* St. Xavier's Coll., Bombay. Mem. of Bombay Mun. Corp. Chairman of its Standing Committee, 1921-22; and President, 1923-34; Chairman, Bombay Millowners' Association, 1927-28; President, Indian Merchant's Chamber, 1928-29. *Publications :* The Political Future of India (1908) *:* Life of Sir Pherozeshah Mehta (1921). *Address :* Cumballa Hill, Bombay.

MOHAMED AHMAD SAID KHAN, NAWAB, C.I.E. (1921); Minister of Industries and Agriculture to the Governor of the United Provinces. *b.* 1893. *m.* to daughter of Nawab Bahadur M. Abdus Samad Khan. *Educ.:* M.A.O. College, Aligarh. *Publications :* Council Speeches; Presidential address, All India Moslem Rajput Conference. *Address :* 'Oakover,' Naini Tal; and Chhatari (Bulland Shahar).

MOHAMED RAFIQUE, SIR, B.A. (Cambridge), Bar-at-Law (Middle Temple); Member, Council of Secretary of State for India since 1925. *b.* 29 May 1863. *m.* Azmat Zamani Begum of the family of the Nawab of Patodi (Punjab). *Educ* : M.A.O. College, Aligarh, St. John's College, Cambridge. Practised at the Bar 1886 to 1892; entered Judicial Service as S.C. Court Judge, Lucknow; Addl. Judge 1894, soon after Dist. Judge and in 1911 Judicial Commissioner, Lucknow, and in July 1912 appointed High Court Judge, rtd. 1923, Allahabad. Represented India at the League of Nations in 1924. *Address* : Chandwa li-Baradari, Lucknow

MOHAMMAD AJMAL KHAN, HAKIM MASIH-UL MULK, Physician and Founder of the Ayurvedic and Unani Tibbi College, Delhi. *b.* 1865. Educated at home, *Address :* Sharif Manzil, Delhi.

MOHAMMAD EJAZ RASUL KHAN, RAJA, C.S.I. (1924), Talukdar of Jahangirabad. *b.* 28 June 1884. *Educ.* : Colvin Talukdars School, Lucknow. First non-official Chairman of the District Board, Bara Banki. Besides numerous other charitable contributions, the following are the chief:—Rs. 1,25,000 to the Prince of Wales' Memorial, Lucknow, Rs. 50,000 to Sir Harcourt Butler Technological Institute, Cawnpore, and Rs. 1,00,000 to the Lucknow University. Member of the Red Cross Society. Contributed Rs. 10,000 to Lady Reading Child Welfare Fund and Rs. 5,000 to Aligarh University for Maris Scholarship, Vice-President of the British Indian Association and Member of the United Service Club. Honorary Magistrate and Honorary Munsif, Chairman, Board. *Address:* Dist. Bara Banki; Jahangirabad Palace, Lucknow.

MOHAMMED YAMIN KHAN, THE HON. MR., B.A., of the Allahabad University (1911), Bar.-at-Law; Member, Council of State (1924), Senior Vice-Chairman, Municipal Board, Meerut. *b.* June 1888. *m.* to a cousin. *Educ.* at Meerut College, M.A.O. College, Aligarh and England. Practising as Barrister in Meerut, since Dec. 1914. Acted as Secretary of U. P. War Fund for Meerut District: Secretary, Y.M.C.A. Funds, Secretary, Dist. War League. Was elected a member of the Municipal Board, Meerut, in 1916 and Vice-Chairman a year later, Elected Member, Legislative Assembly, 1920; Member of the Legislative Assembly, 1920-1923. Nominated a member of Leg. Assembly to represent U. P. in 1927 Elected Chairman, Municipal Board, June 1928, *Address :* Junnut Nishan, Meerut.

MOIR, THOMAS EYEBRON, B.A., C.I.E. (1917), C.S.I. (1922), Member of the Executive Council, Madras. *b.* 1874. *Educ.:* Fettes

Coll., Edinburgh, Wadham Coll., Oxford. Ent. I.C.S., 1898. *Address* : Fort St. George, Madras.

MOLONEY, WILLIAM JOSEPH, General Manager for the East, Reuters Limited. *b.* May 28, 1885. *m.* Katharine, eldest daughter of Sir Francis Elliot, G.C.M.G., G.C.V.O., *Educ.:* Redemptorist College, Limerick. Reuters' Correspondent in Teheran, Constantinople, Paris, Amsterdam, Copenhagen and Berlin. *Address* : Reuters Limited, Bombay.

MONTMORENCY, SIR GEOFFREY DE, (See De Montmorency, Sir Geoffrey.)

MOOKERJEE, SIR NARAYAN, Zamindar of Uttarpara; *b.* April 1859. Member, Bengal Legislative Council, since 1918; *m.* 1878; one *s.* *Educ.:* Uttarpara School; Presidency College, Calcutta; Chairman of the Uttarpara Municipality since 1887; Chairman of the Bench of Hon. Magistrates, 1889; Managing Committee of the British Indian Association, 1889; a Member of the Asiatic Society; a life Member of St. John Ambulance Association; Member of the Provincial Advisory Committee for Indian Students, 1918; a Member of the National Liberal League, and Vice-President of Bengal Humanitarian Association; elected to Executive Committee of All India Landholders' Association, 1919. *Address:* Uttarpara, near Calcutta.

MOOKERJEE, SIR RAJENDRA NATH K.C.I.E., K.C.V.O. (1922), M.I.M.E. (Hon. Life) M.I.E., (Ind.) Civil Engr.; *b.* 1884; *Educ.:* London Missionery Institution at Bhowanipur: Presidency College, Civil Engineering Branch, Calcutta; Senior Partner in Martin & Co., and Burn & Co., Calcutta; Member of Indian Industrial Commission, 1917-1918: Member of Indian Railway Committee, 1920-1921; President, Howrah Bridge Committee, 1921; President, Bengal Retrenchment Committee, 1922; Member, All-India Retrenchment Committee, 1922, Royal Commission on Indian Currency and Finance, 1926, President of Board of Trustees, Indian Museum, Calcutta; a Fellow of Calcutta Univ., Member of Court of Visitors, Ind. Inst. Science; Sheriff of Calcutta, 1911; Member of the Board of the Governing Body of Bengal Engineering College. Ex-President, the Institution of Engineers (India). Member, Governing Body of the School of Tropical Medicine and Hygiene; President, Indian Science Congress, 1922; President, Asiatic Society of Bengal, 1924. Governor, Imperial Bank of India, 1921-1928. *Address*: 7, Harington Street, Calcutta.

MOORE, PIERCE LANGRISHE, C.I.E.; Ag. Financial Secretary to the Government of Madras. *b.* 29th June 1873. *m.* Muriel, *d.* of the late Lumsden Strenge. *Educ.:* Cheltenham: Christ Church, Oxford. Ent. I.C.S., 1896; President, Madras Corporation, 1910-14. Inspector-General of Police, Madras, 1914-18. *Address:* Madras Club, Madras.

MOORE, W. ARTHUR, Director of *The Statesman.* M.L.A. (Bengal European Constituency); Classical Scholar of St. John's College, Oxford, 1900-1904; President, Oxford Union Society, 1904; *b.* 1880. *m.* Maud Eileen, only surviving child of George Maillet. *Educ.:* Campbell Coll., Belfast and St. John's College, Oxford. Secretary, Balkan Committee, 1904-08, during which time travelled extensively in all the Balkan Countries. Special Correspondent of *The Times* for Young Turk Revolution, 1908, and in Albania; special correspondent 1909, *Daily Chronicle, Daily News* and *Manchester Guardian* at Siege of Tabriz, Persia. Joined foreign and war staff of *The Times,* 1910; Persian Correspondent, 1910-12; Russian Correspondent, 1913; Spain, 1914; Albanian Revolution, 1914. Retreat from Mons and Battle of Marne, 1914; obtained commission in Rifle Brigade; served Dardanelles, 1915; Salonika, 1915-17 (General Staff Officer, 3rd Grade); flying, 1918. with military mission (General Sir G. T. Bridges) in Constantinople and the Balkans; Squadron Leader, R. A. F.; demobilised May 1919; despatches twice; M.B.E (military): Serbian White Eagle: Greek Order of the Redeemer; Middle-Eastern Correspondent of *The Times,* 1919-22, visiting Egypt, Palestine, Syria, Mesopotamia, Persia, Caucasus, India, Afghanistan, etc. *Publications:* The Miracle (By 'Antrim Oriel,' Constable, 1908): The Orient Express (Constable 1914). *Address:* "The Statesman," Calcutta.

MOOS, DR. F. N., M.D., B.S. (Lond.); D.P.H. (Eng.): D.T.M. & Hy. (Eng.); M.B., B.S. (Bombay); F.R.I.P.H. (London), J.P., Superintendent and Chief Medical Officer Goculdas Tejpal Hospital. *b.* 22 Aug. 1893 *Educ.:* at Cathedral and New High Schools, Elphinstone and Grant Medical College, Bombay; Univ. Coll. and Hospital, London, Clinical Fellow in Medicine, Grant Coll.. Bombay; Medical Registrar, J. J. Hospital Bombay, House Surgeon, Metropolitan. Hospital, London, Tuberculosis Medical Officer, Boros of Stocke Newington, Hackney and Poplar, London; Medical Referee, London. War Pensions Committee; Lecturer on Tuberculosis, University of Bombay; Hon. Physician, G. T. Hospital, Bombay. Fellow of the Royal Society of Public Health; Fellow, University of Bombay. *Publications*: Present Position of Tuberculosis, Prevention of Tuberculosis and Pandemic of Influenza, 1918, etc., etc. *Address:* Alice Buildings, Hornby Road, Fort, Bombay.

MOOS, NANABHOY A. F., D.Sc. (Edin.), L.C.E. (Bom.), F.R.S. (Edin.), Retired Director, Bombay and Alibag Observatories. *b.* 29 Oct. 1859. *m.* Bai Jeeloobai, *y. d.* of Byramjee Jeejeebhoy, Esq. *Educ.:* Bombay University and Edinburgh University; Prof. of Physics, Elphinstone Coll., Bombay; for some time Inspector of Factories, Bombay Presidency; from 1896 to 1920 Director of Bombay and Alibag Observatories: Syndic and Dean in Science, Bombay Univ.; Representative of the Northern Universities, Bombay, Punjab and Delhi, on the Council of the Indian Institute of Science, Bangalore, of the Bombay University on the Advisory Committee of the Coll. of Engineering, Poona; Advisory Committee of the Royal Institute of Science, Bombay; Board of Trustees of the Prince of Wales Museum, Bombay, and Board of Trustees, Victoria Technical Institute. *Publications:* Papers in Royal Society, Edinburgh,

and Publications in the series, Bombay Observatory's Publications 1896-1920. Bombay Magnetic Data and Discussion, 1846-1915. Vols. I, and II. *Address :* Gowalia Tank Road, Bombay.

MORENO, H. W. B., DR., Ph.D., M.R.A.S. (London). *b.* 1875. *Educ.*: at Calcutta University and Merchiston, Edinburgh. Editor, *Century Review*, a weekly Recorder : Lecturer, Calcutta University ; Hon. Magte., Sealdah, Calcutta. *Publications :* "History of the Bengal Newspapers" "Sorab and Rustom" "Story of the Rings", etc. *Address :* 2, Wellesley Square, Calcutta.

MOTI CHAND, THE HON. RAJA, C.I.E. (1916) Banker, Landlord and Millowner. *b.* 2 Aug. 1876. *Educ.:* privately. First Non-Official Chairman, Benares Municipal Board ; Chairman, Benares Bank, Ltd.; Chairman of Benares Cotton and Silk Mills, Ltd.; Chairman, Benares Industries, Ltd., Member, U.P. Legislative Council from 1913-1920; Member. Council of State since 1920 ; Hon. Treasurer and Member of the Court and the Council of the Benares Hindu University ; Chairman of numerous local bodies, educational, industrial and social. Director of the British India Corporation, Ltd., Cawnpore, and Member, U. P. Chamber of Commerce, Cawnpore. *Address :* Azmatgarh Palace, Benares.

MOZOOMDAR, RAI JADUNATH BAHADUR, VEDANTA VACHASPATI, M.A., B.L., Kaiser-i-Hind (1915). C.I.E. (1921). M.L.C., Advocate. and Landholder. *b.* Oct. 1859. *m.* Srimati Saratkumari, *d.* of late Babu Abhaya Charan Sarkar. *Educ.*:Canning Coll., Lucknow and Free Church Coll., Calcutta. Professor, Sanskrit College, Calcutta ; Editor, *Tribune*, Lahore ; Secry., Finance Dept., Kashmir, Principal, Katmandu Coll., Nepal ; Advocate, Calcutta High Court. *Publications :* Amitva Prasar in 2 parts in Bengali; Commentary on Vedanta Philosophy in Bengali ; Religion of Love in English, essays and addresses in English; Appeal to young Hindus in English ; and numerous other works ; Editor, *Hindu Patrika*. *Address :* Jessore, Bengal.

MUHAMMAD ABDULLAH, SAIYED, B. A. Zemindar and Member, Legislative Assembly, (1920), *b.* 1878. *m.* Mahmudetun Nesa Bibi, *d.* of late Chaudhury Keramutullah of Salar (Murshidabad) 1887. *Educ. :* Calcutta Madrassa Presidency Coll. & Ripon Coll., Hon. Magte., Rampurbet, 1896 ; elected member, Local and Union Boards ; Commissioner, Meherpur Municipality ; apptd. Sub. Deputy Collr. and Magte., 1905 and Sub-Divl. Officer, Begusarai Dt., Monghyr and Meherpur (Nadia Dist). Asstt. Settlement Officer, Bhabna (Shahabad). Resigned 1917. *Address :* Margram, Birbhum Dist.

MUHAMMAD ABDUL QUADIR, KHAN SAHEB MAULVI, B.A., LL.B., M.L.A., Pleader. *b.* 26th Dec. 1867. *Educ.:* Government College, Jubbulpore, C.P. and M.A.O. College, Aligarh. Was for some time Headmaster, Mohindra High School, Tikamgarh, Orchha, Bundelkhand. Practised in 1898 at Amraoti (Berar); Official Receiver (1917), Hon. Secry., Berar Mahomedan Educational Conference. *Address ;* Amraoti Camp (Berar), C.P.

MUHAMMAD MUKARRAM ALI KHAN, MUMTAZ-UD-DOWLAH NAWAB, Chief of Pahasu Estate and Tazimi Jagirdar (Jaipur State). *b.* 2 Sept. 1895. *m. d.* of late Lahafat Ali Khan, 2nd marriage, *d.* of Rao Abdul Hakeem Khan of Khairi Dist., Sharanpore, Chief of Saadabad. *Educ. :* Maharaja's Coll., Jaipur and M.A.O. Coll., Aligarh; *Publications :* Sada-i-Watan Tauqeed Nadir ; Swarajya Home Rule. *Address*: Pahasu House, Aligarh.

MUIR, WINGATE WEMYSS, LIEUT-COL. C.B.E. (1926). M. V. O. (1923), O.B.E. (1918), Officer of the Crown of Roumania 1920 ; Commander of the Crown of Belgium 1926 ; Comptroller, Viceregal Household. *b.* 12th June 1879. *Educ.* Haileybury College and the R.M.C. Sandhurst. Was in the Bedfordshire and Hertfordshire Regiment and 15th Ludhiana Sikhs (I.A.). *Address* Viceregal Lodge, Delhi and Simla.

MUKANDI LAL, B . (Oxon.), Bar-at-law, M.L.C., Dy. President, U.P. Legis. Council. *b.* Oct. 1890. *Educ.* at Schools Pauri and Almora, in colleges at Allahabad, Benares and Calcutta, and Christ Church, Oxford, Hist. Honrs. 1917, Called to Bar, Grays Inn. 1918; Married in England ; returned to India, 1919 . enrolled Advocate, Allahabad High Court 1919 elected to U.P. Legislature Council for Garhwal, 1923 and 1926. Belongs to Swaraj Party. Writes to Hindi and English periodical papers and is an exponent and critic of Indian Art. *Address* : Lansdowne, Dist. Garhwa , U.P.

MUKERJI, MANMATHA NATH, THE HON. MR. JUSTICE, M.A., (Cal.), B.L, Puisne Judge, High Court, Calcutta since 1924. *b.* 28 Oct. 1874. *m* Sm. Sureswari Debi, eldest *d.* of Sir Gooroo Dass Banerjee. *Educ.* Albert Collegiate School and College, Presidency College, Calcutta, and Ripon College Law Classes. Vakil, Calcutta High Court, from Dec. 1898 to Dec. 1923. *Address.* 8-1, Harsi Street, Calcutta.

MUKHERJEE, BABU JOGENDRA NATH, M.A., B.L., Advocate, High Court, Calcutta. *b.* 23rd June 1861. *m. d.* of late Babu Harinath Chatterjee, of the Provincial Executive Service. *Educ.:* Presidency College and Hindu School, and Government Pathashala, Calcutta. Practised as pleader at Purnea, 1886-1908 ; was Municipal Commissioner, Vice-Chairman, Purnea Municipality ; and Chairman altogether for about 18 years ; Member of Bengal Legislative Council (1905-1907), practised Calcutta High Court from 1908 ; Prof. of Hindu Law in the Calcutta Law College from 1909-1919 ; Chairman of Professors, Criminal Law in that Coll., 1918-19. Member, Legislative Assembly, 1921-23. *Publications :* (1) The Legislative Assembly and its work (brochure) ; (2) Dilettantism in Social Legislation ; (3) An address on Hindu music delivered at "Indian Musical salon" held at Government House, Calcutta, on 7th Dec. 1920. *Address :* 18, Pran Kissen Mookerjee Road, Tallah, Calcutta.

MUKHERJEE, THE HON. SRIJUT LOKENATH, Zamindar having properties extending over many districts ; an Executive of Uttar-

para Municipality: Member of Council of State. *b.* April 1900. *m.* Srimati Sailabala Devi d. of Rai Bahadur Ramsadan Chatterjee, Retired Mgte. of Bankura. *Educ.:* Uttarpara Govt. High School and Presidency College, Calcutta. Elected Commissioner, Uttarpara Municipality in 1921; was Chairman for some time in 1924 and again in 1925; at present an executive of the Municipality; now an elected Member, Council of State, for West Bengal Constituency. *Address:* "Rajendra Bhaban", Uttarpara, Bengal.

MULLA, DINSHAH FARDUNJI, HON'BLE MR., M.A., LL.B., C.I.E., ex-Judge of the Bombay High Court. *b.* April 1868. *m.* Jerbai, *d.* of F. F. Karaka of Bombay. *Educ.;* at Sir Jamsetji Jijibhoy School and Elphinstone College, Bombay, Fellow of the Bombay University. Late President, Tribunal of Appeal, Bombay, 1919-1921. Law Member of H. E. the Viceroy's Executive Council. *Publications*: Commentaries on the Code of Civil Procedure; Principles of Hindu Law; Principles of Mahomedan Law; Joint author of Pollock and Mulla's Indian Contract Act. *Address*: 21, Marine Lines, Bombay.

MULLAN, JAL PHIROZSHAH, M.A., F.L.S., F. Z. S., F.E.S.; Prof. of Biology, Director, Zoological Laboratory, St. Xavier's College. *b.* 26 March 1884. *Educ:* St. Xavier's College, Bombay Professor, Examiner, University of Bombay. *Publications*: "Animal Types for College Students". *Address:* "Vakil Terrace", Lamington Road, Grant Road, Bombay.

MULLICK, SIR BASANTA KUMAR, KT. (1920); Judge, Patna High Court, since 1916. *Educ.:* Univ. Col. Sch.; King's Coll., Cambridge. Ent. I.C.S., 1887; Actg. Judge, Calcutta High Court, 1913; Puisne Judge, 1915, Ag. Chief Justice, 1925. *Address:* Bankipore.

MUMTAZUDDOLAH, NAWAB SIR MOHAMMAD FAIYAZALI KHAN, K.C.V.O., K.C.I.E., C.S.I., C.B.E., Nawab of Pahasu, Minister, Jaipur State; *b.* 4 Nov. 1851; late Member of Supreme and Provincial Legislative Councils. *Address:* Nawab's House, Jaipur.

MUNMOHANDAS RAMJI, THE HON. SIR, KT. (1927) J.P., Merchant and Millowner and Member, Council of State. *Educ.:* Bombay High School. Represented Indian commercial community in the old Bombay Legis. Council from 1910 to 1920; served on the Municipal Corporation for 18 years; elected President of the Corporation for 1912-13; served also on the Committees of Indian Merchants'Chamber, Bombay Millowners' Association and Bombay Native Piecegoods Merchants' Association for more than 25 years; was President of Indian Merchants' Chamber 1907-13 and again in 1924 and of the Bombay Millowners' Association in 1909; served several periods on the Board of the Bombay Port Trust; is a member for a number of years of the Board of Trustees of V. J. Technical Institute; was a member of the Advisory Committee to the Director of Industries; and of the Advisory Board to the Development Department; is at present a member of the Advisory Committee of the B.B. & C.I. Railway. Represented Indian Merchants' Chamber on the Legislative Assembly, 1921-23; served on the Braithwaite Committee, Railway Advisory Committee, Railway Risk Note Committee, and Income-Tax Committee. Elected Member of Council of State, June 1925 and re-elected in November 1925. *Address*: Ridge Road, Malabar Hill, Bombay.

MURSHIDABAD, NAWAB BAHADUR OF, K.C.S.I., K.C.V.O., The Hon. Ihtisham-ul-Mulk, Rais-ud-Dowla, Amir-ul-Omrah, Nawab Asef Kudr Syud Wasef Ali Meerza, Khan Bahadur, Mahabut Jung; premier noble of Bengal, Behar and Orissa; 38th in descent from the Prophet of Arabia; *b.* 7 Jan. 1875; *m.* 1898, Nawab Sultan Dulin Fugfoor Jahan Begum Saheba. *Educ.:* in India, under private tutors and in England, at Sherborne, Rugby, and Oxford; has six times been Mem. of Bengal Leg. Council. *Address:* The Palace, Murshidabad.

MURTRIE, DAVID JAMES, O.B.E., I.S.O.; Dy. Dir.-Gen., Post Offices, 1916-1921 (retired); *b.* 18 Dec. 1864; *Educ.:* Doveton Prot. Coll., Madras. Ent. Govt. Service in Post Office, 1884; Pres. Postmaster, Bombay, 1913-16. *Address:* "Looland," 8a., Cunningham Road, Bangalore.

MUTALIK, VISHNU NARAYAN *alias* ANNASAHEB, B.A., Sardar of the Deccan, Inamdar and Saranjamidar; Member, Legislative Assembly. *b.* 6 Sept. 1879. *m.* S. Ramabaisaheb, *d.* of Mr. K. Bhiranhi, Pearl Merchant. *Educ.:* at Satara High School and the Deccan Coll., Poona. Member, Bombay Legislative Council for the Deccan Sardars, 1921-1923. President, Inamdars' Central Association, 1914 and onwards to the present day; Chairman, Satara City Municipality for 4 years; Member of Dist. and Taluka Local Board, Satara, for over 15 years. Was appointed non-official member of Army Accounts Committee, 1925-26 to represent Legis. Assembly on the Committee; President of the 1st Provincial Confce. of Sirdars, Inamdars and Watandars 1926 and President Provincial Postal Confce. 1926. Elected Chairman of the Executive Committee of the Provincial Conference of Shri Sardars and Inamdars, 1927. *Publications:* Currency System of India in Marathi. *Address*: Shanwar Peth, Satara City.

MUTHIAH CHETTIAR, SIR M., CT., KT. 1922. Banker *b.* 8 February 1887. *m.* to Thevanai. *Educ.:* Maharaja's College, Pudukottai. President, South India Chamber of Commerce; Chairman, Madras Stock Exchange; Director of Indian Bank, Ltd., Madras; Ex-Trustee, Madras Port Trust; Trustee, Pachaippa's Educational Charities; Member, Advisory Board, South Indian Railway Co., Ltd., Sheriff of Madras, 1921 and 1922; Presdt., United India Life Assurance Co.; was Member of Madras Legis. Council for a period before the Reformed Council and for one period after the Reformed Council and a Member of the Legis. Assembly *Publications*: Author of the Chapter on "Indigenous Banking" in Dr. Khan's book. *Address:* "Bedford House," Vepery, Madras.

MYSORE, H. H. THE MAHARAJA OF, COL. SIR SHRI KRISHNARAJA WADIYAR BAHADUR, G.C. S.I.; G.B.E. *b.* 4th June 1884; *s.* father, 1895. Invested with full ruling powers by Lord Curzon, at Mysore, 1902; present at Delhi

Durbar, 1903. Celebrated Silver Jubilee of his reign on 8th Aug. 1927. Area of State is 29,444 square miles, and its population is nearly 6,000,000. *Address:* The Palace, Bangalore, Mysore; Fern Hill, Nilgiris.

MYSORE HIS HIGHNESS YUVARAJA OF, SIR SRI KANTHIRAVA NARASIMHARAJA WADIYAR BAHADUR, G.C.I.E., *b.* 5 June 1888; *y. s.* of late Maharaja Sri Chamarajendra Wadiyar Bahadur. Takes keen interest in welfare of people and in all matters of education, health, and industry. *Address*: Mysore.

NABHA, MAHARAJA SRI RIPUDAMAN SINGHJI MALAVENDRA, BAHADUR OF, F.R.G.S., M.R.A.S.; *b.* 14 March 1883; s. 1911. *Educ.*: privately. Travelled good deal in India and abroad; Mem., Viceroy's Council, 1906-08; Pres. of Ind. Nat. Soc. Confce., 1909; attended Coronation of King, accompanied by Maharani, 1911. Abdicated, 1923.

NAG, GIRIS CHANDRA, RAI BAHADUR, M.A., B.L. *b.* 14 Feb. 1864. *m.* Sreemati Kunjalata, *d*, of Rai Saheb P. C. Deb of Sylhet. *Educ.*: Calcutta Presidency College. Professor, Ravenshaw Coll., Cuttack (1886-1890); Pleader, Sylhet Judge's Court, 1890-1892; Member, Assam Civil Service, 1892-1919; Member, Dacca University Court, and Member Leg. Assembly. *Publications:* "Back to Bengal." *Address.* Bakshi Bazar, Dacca.

NAGOD, RAJA JADUBIND SINGH, RAJA OF; *b.* 30 Dec. 1855; *s.* 1874; dynasty has ruled at Nagod for over nine centuries; State has area of 501 square miles, and population of 84,097; salute 9 guns. *Address*: Nagod, Baghelkhand.

NAGPUR, R. C. BISHOP OF; *see* Coppel.

NAIDU, SAROJINI, MRS., Fellow of Roy. Soc. of Lit. in 1914; *b.* Hyderabad, Deccan, 13 Feb. 1879. *Educ.:* Hyderabad: King's Coll., London; Girton Coll., Cambridge. Published three volumes of poetry in English, which have been translated into all Indian vernaculars, and some into other European languages; also been set to music; lectures and addresses on questions of social, religious, and educational and national progress; specially connected with Women's Movement in India, and welfare of Indian students. President, Indian National Congress, 1925. *Address:* Hyderabad, Deccan.

NAIR, CHETTUR MADHAVAN, THE HON. MR. JUSTICE, B.A., Bar-at-Law. Judge, High Court, Madras. *b.* 24th Jan. 1879. *m.* Sreemathi Palat Parukutty Ammah, eldest *d.* of Sir C. Sankaran Nair. *Educ.* Victoria Coll., Palghat, Pachaiyappas and Christian Colleges, Madras, Law Coll., Madras, Univ. Coll. London, and also the Middle Temple, London. Enrolled in the Madras High Court, 1904; officiated as Vice-Principal, Law Coll., Madras 1909; officiated as Principal Law Reporter 1915-16; apptd. Prof. 196-20; Govt. Pleader 1919-23; Advocate-General, Madras 1923-24; Judge of High Court 1924, confirmed 1927. *Address*: Moorat's Gardens, Nungambaukam, Madras.

NAIR, MANNATH KRISHNAN, DEWAN BAHADUR (1915); Member, Executive Council, Government of Madras (1928) *b.* August 1876. *Educ.:* Alathur; Calicut, and Christian College and Law College, Madras. Vakil, Calicut Bar, Ch. Justice, Travancore High Court, for four years. Dewan, Travancore, May 1914 to July 1920. *Address:* Mohana Vilas, Ormes Road Kilpank, Madras.

NAIR, *see* SANKARAN NAIR.

NAMBIAR, CHANDROTH KUDALI THAZHATH VITTIL KUNHI KAMMARAN, Landlord, M.L.A. *b.* Dec. 1888. *m.* Kalliat Madhavi Amma, *d.* of V. Ryru Nambiar, B.A., B.L., High Court Vakil. *Educ.:* at the Mission High School, Brennen College, Tellicherry and Madras Medical College. Succeeded to the management of the Chandroth estate after the death of his brother in 1912; in 1914 was elected to the Tellicherry Taluk Board and in 1916 to the Malabar District Board of which he continues to be a member. In 1924 was returned to the Legislative Assembly as the representative of the Madras Landholders. *Address:* Panoor, *via* Mahe, N. Malabar.

NANAVATTY, DR. BYRAMJI HORMASJI, F.R.C.S. Ed. F.C.P.S., L.M. & S. (Hon.); Khan Bahadur (1910); C.I.E., June (1925); Consulting Surgeon and Physician. Specialist in Eye Diseases from Royal Ophthalmic Hospital, Moorfields, London; *b.* December 1858, *m.* Dhanbai, daughter of the late Mr. M. N. Nanavatty (Treasury Officer, Surat) and cousin of Mr. E. M. Nanavatty, I.C.S. *Educ.* Ahmedabad and Bombay and later on in London and Edinburgh; Held for many years the posts of Lecturer of Surgery (clinical) and operative and midwifery in one of the provincial medical schools of the Bombay Presidency. Was subsequently appointed Civil Surgeon, Surat. Appointed a Fellow of the Bombay University in 1897 and is now also an ordinary Fellow. Was for many years Examiner in Surgery and Midwifery in the L. M. & S., and M. B., B.S., Examinations of the Bombay University, and also in the L.C.P.S. and M.C.P.S. examination of the College of Physicians and Surgeons, Bombay, of which Council he is also a member. A Municipal Councillor of over 20 years standing and Chairman, Sanitary Committee. President, Hemabhai Institute; Vice-President of three important public bodies, *viz.*, Ahmedabad Municipality, Ahmedabad Sanitary Association and the Society for the Prevention of Cruelty to Animals; Member, Civil Hospital Advisory Committee and of the Committees of Becherdas Dispensary, Victoria Jublilee Hospital for Women and Leper Asylum; a leading Freemason and a Past Master of Lodge Salem. Was awarded by Government a gold medal for services rendered during the Ahmedabad riots of 1919. *Publications:* "Duties and Responsibilities of Practitioners and Students of Medicine," "On Different Methods of Cataract Extraction." "Uræmia following on Catheterism," "Glioma Retinæ, etc. *Address:* Ahmedabad."

NANDY, MAHARAJA SIR MANINDRA CHANDRA, K.C.I.E., See under Kasimbazar, Maharaja of.

NANDY, MAHARAJ-KUMAR SRISCHANDRA, M.A. (1920), *s.* and *x.* of Maharaja Sir Manindra Chandra Nandy, Bahadur, K.C.I.E., of Kasimbazar, Bengal. *b.* 1897 *m.* 1917

second Rajkumari, of the late Hon. Raja Promoda Nath Roy of Dighapatia. *Educ.:* Berhampore Coll., Bengal, and Presidency Coll., Calcutta; Chairman, Berhampore Municipality; Hon. Magte., 1st class Berhampore, and Member, Bengal Legislative Council (Since 1924). Member, Historical Society and Asiatic Society of Bengal; Life Member, Viswa Bharati. *Address:* "Rajbari," Kasimbazar, or 302, Upper Circular Road, Calcutta.

NANJUNDAYYA, H. VELPANURU, C.I.E. *b.* 13 Oct. 1860; *Educ.:* Wesleyan Mission Sch., Mysore; Christian Coll., Madras; Madras Univ. (Fellow, 1895). Ent. service of Mysore Govt., 1885; Judge, Chief Court of Mysore, 1904; Mem. of Council and Ch. Judge of Chief Court; retired 1916; Vice-Chancellor, Mysore Univ. *Address:* Mallesvaram, Bangalore.

NARIMAN, SIR TEMULJI BHICAJI, KT., M.R.C.P. (Edinburgh), Hon. Causa, 1922; Sheriff of Bombay, 1922-23. Chief Physician, Parsi Lying-in Hospital; President, College of Physicians and Surgeons; *b.* Navsari, 3rd Sept. 1848; *Educ.:* Grant M.C.; Elphinstone Coll.; Fellow of Bombay Univ., 1883; J.P., a Syndic in Medicine, 1891; a Dean in Faculty of Medicine, 1901-02; Mem., Bombay Leg. Council, 1909; Mem. of Provincial Advisory Committee, 1910. Member, Bombay Medical Council, 1913. *Address:* Fort, Bombay.

NAROTTAM MORARJEE, Mill Agent and Merchant, *b.* 2nd April 1877. *Educ:* Elphinstone College, Bombay. *Address:* "Shanti Bhavan", 42-46, Pedder Road, Bombay.

NARSINGHGARH, HIS HIGHNESS SRI HUZUR RAJA VIKRAM SINGH SAHIB BAHADUR, *b.* 21 September 1909: belongs to Paramar or Ponwar branch of Agnikul Rajputs; *s.* 1924. *Educ.:* Mayo College, Ajmer; State is 734 sq. miles in extent, and has population of 101,426; salute of 11 guns. Regent Her Highness the Rani Shiv Kunwar Sahiba D.B.E. *Address:* Narsinghgarh, C.I.

NASIK, BISHOP OF (RT. REV. PHILIP HENRY LOYD, M.A.). Educated at Eton and King's College (late Scholar and 1st class Classical Tripos.) On being ordained deacon in the Diocese of London, became Chaplain to the Eton College Mission and Curate of St. Mary of Eton, Hackney Wick. Vice-Principal of Cuddesdon College from 1912 to 1915, when he came to India as an S. P. G. Missioner. Priest-in-charge at Miri, 1915-1917, Chaplain to Bishop Palmer of Bombay 1917-1919, S.P.G. Missioner at Ahmednagar 1917-1925. Consecrated Bishop Suffragan of Ahmednagar and Assistant Bishop of Bombay, 1925. Appointed first Bishop of the new Diocese of Nasik, 1928.

NATARAJAN, KAMAKSHI, B.A. (Madras University), 1889, Editor, *The Indian Daily Mail* and *The Indian Social Reformer*, Bombay; *b.* 24th Sept. 1868. *Educ.:* St. Peter's H.S., Tanjore; Pres. Coll., Madras; Govt. Coll., Kumbakonam; and Law Coll., Madras. Headmaster, Aryan H. S., Triplicane, Madras; Asst. Editor, the *Hindu*, Madras; Pres., Madras Prov. Soc. Confce., Kurnool 1911; and Pres., Bombay Prov. Soc. Confce. Bijapur, 1918, President, Mysore Civic and Social Progress Conference, 1921, and President, National Social Conference, Ahmedabad, 1921: General Secretary, Indian National Social Conference, 1923-24. President, 40th Indian National Social Conference, Madras, 1927. *Publications:* Presidential addresses at above conferences; Report of Census of Hyderabad (Deccan), 1911. A Reply to Miss Katherine Mayo's "Mother India" (G.A., Natesan & Co., Madras) *Address: The Indian Social Reformer* Office, Fort, Bombay, and "Kamakshi House," Bandra, Bombay.

NATESAN, THE HON. MR. G. A., head of G. A. Natesan & Co., and Editor, *The Indian Review*; Member, Council of State. *b.* 25th August 1874. *Educ.:* High School, Kumbakonam; St. Joseph's School, Trichinopoly; H. H. School, Triplicane; Presidency College, Madras University, B.A. (1897). Fellow of the Univ. and Commissioner, Madras Corpn. Has taken a leading part in Congress work. Joined Moderate Conference, 1919. Sec., Madras Liberal League. Joint Secretary, National Liberal Federation of India, 1922. *Publications:* chiefly patriotic literature and speeches, etc., of public men, "What India Wants," "Autonomy within the Empire." *Address:* George Town, Madras.

NATHUBHAI, TRIBHOVANDAS MANGALDAS, J.P.; Hon. Mag. and Fellow of Univ., Bombay; Sheth or Head of Kapol Banya community, resigned presidentship after tenure thereof for 25 years, 1912. *b.* 28 Oct. 1856. *Educ.:* St. Xavier's Coll., Bombay. Was for 20 years an elected Mem. of Bombay Mun. Corpn.; has been Hon. Mag. since establishment of Courts of Bench Magistrates in Bombay. *Address:* Sir Mangaldas House, Lamington Road, Bombay.

NAWAB SALAR JUNG BAHADUR, *b.* 13 June 1889. *Educ.:* at Nizam College; Prime Minister of Hyderabad, 1912-14. *Address:* Hyderabad, Deccan.

NAWANAGAR, H. H. MAHARAJA JAM SHRI RANJITSINHJI, G.C.S.I., G.B.E., K.C.S.I.; Hon. Lt.-Colonel in army; *b.* Sarodar, 6th September 1872; *Educ:* Rajkumar Coll., Rajkot; Trinity Coll., Cambridge. First appearance for Sussex C. C. C., 1895; head of Sussex averages same year; head of Sussex averages, 1895-1902; champion batsman for all England in 1896 and 1900, scoring 2,780 runs with an average of 59·91; went with Stoddart's All England XI to Australia, 1897-98; served European War, 1914-15; represented India first Meeting of League of Nations at Geneva in 1920, also 3rd Meeting in 1922, also 4th Meeting in 1923. *Address:* Jamnagar, Kathiawar.

NEEDHAM, BREVET-COLONEL RICHARD ARTHUR, B.Sc., M.D., D.P.H., F.R.C.P. (Edinburgh), D.S.O. (1916), C.I.E. (1919); *b.* 1877. Inspector of Medical Education in India on behalf of the General Medical Council of the United Kingdom; on special duty, Railway Road. *Address:* Simla and Lahore.

NEHRU, PANDIT MOTILAL, Member, Legis. Assembly for The Seven Cities of U.P. *b.* 6th May 1861. President, U.P. Provincial Conference, 1907; Member, U.P. Legis. Council; Founded *The Independent*, 1919. Presdt.,

Indian National Congress in 1919; suspended practice at the Bar in pursuance of non-co-operation resolution, 1920; imprisoned for six months, 1921-22; Leader of the Swaraj Party in the second Legislative Assembly, 1924-26; elected President of the All-India Swaraj Party on the death of C. R. Das, 1925; appointed member, Indian Sandhurst Committee, but subsequently resigned on the fusion of the Swaraj Party into the Congress, 1926; elected Leader of the Congress Party in the present Legislative Assembly, 1927; resumed practice at the Bar, April 1927. *Address:* Anand Bhawan, Allahabad.

NEHRU, PANDIT SHAMLAL, M.L.A., Journalist *b.* 16 June 1879. *m.* Oma, *d.* of Pandit Niranjan Nath Hukku. *Educ.:* at Allahabad. Member, All-India Congress Committee, Provincial Congress Committee (U. P.), Allahabad Town Congress Committee, Allahabad Municipal Board; Chairman, Allahabad Public Health Committee; Member, Allahabad Improvement Trust; Member, Khilafat Committee; Member, Legis. Assembly; six months' imprisonment and fine for non-co-operation (1921-22). *Publication:* Founder of "The Democrat" newspaper of Allahabad. *Address:* Allahabad, U. P.

NEILSON, WILLIAM HARDCASTLE, O.B.E. (1919), V.D., J.P., M.A., M.A.I., Chairman, Bombay Port Trust. *b.* 21 Feb. 1875; *m.* Ethel Maud, only *d.* of the late Frank Phillips of Plymouth. *Educ.:* Mr. Strangway's School, Dublin; Trinity College, Dublin; Asstt. Engineer, Keyham Dockyard Extension, Devonport, 1900; Asst. Engineer, Calcutta Port Commissioners, 1905; Port Engineer, Chittagong Port Commissioners, 1907; Chief Engineer, Karachi Port Trust, 1916; Chief Engineer, Bombay Port Trust, 1922; Chairman, Bombay Port Trust, 1923; Controller of Munitions, Karachi Circle, 1917; Lt.-Col., Bombay Battalion, A. F. I.; Member, of Inst. Civil Engrs., Inst. Mech. Engrs. American Soc. C.E., President, Inst.. Engrs. (India). *Publications:* Report on Grain Elevators in Canada and United States. *Address:* Bombay Port Trust.

NELSON, SIR ARTHUR EDWARD, KT. (1929), C.I.E., O.B.E., B.A., I.C.S., Member. Executive Council, Central Provinces. Joined the Indian Civil Service in 1898; till 1909 served as Assistant Commissioner, Registrar Co-operative Societies, Provincial Superintendent, Imperial Gazetteer and Superintendent of Ethnography; served in Finance Department, Government of India, 1910; reverted to C. P. Government, 1911; became Assistant Commissioner and Settlement Officer, 1913; Deputy Commissioner, 1915; Commissioner of Excise, 1916; and Chief Secretary to the Chief Commissioner in 1920; Member, C. P. Executive Council, 1927. *Address:* Nagpur, C.P.

NEOGY, KSHITISH CHANDRA, M.L.A., representing, since 1921, the non-Mahomedan Electorate, Dacca Divn., E. Bengal. Vakil High Court, Calcutta. Journalist. *b.* 1888. *Educ.:* Presy. Coll., Calcutta. Dacca Coll., *m.* Sreematy Lila Devi. Some time a member of the All-India Council of the Nat. Lib. Fedn.; Elected Member of the Dacca Univ. Court, 1921-24; one of the Chairman of the Leg. Assembly since 1924. *Address:* 48, Toynbee Circular Road, Wari, Dacca; and P. 393, Russa Road, Tollygunge P. O., Calcutta.

NEPAL, HIS HIGHNESS PROJJWALA-NEPALA TARADHISHA MAHARAJA CHANDRA SHUM SHERE JUNG BAHADUR RANA, G.C.B., (Hon., 1908), G.C.S.I., (Hon., 1905), G.C.M.G. (1919), G.C.V.O., (1911). D.C.L., (Hon., Oxford, 1908), F.R.G.S., (Hon., 1912), Thong-lin Pimma-Kokang-Wang-Syan, (Chinese, 1902), Grand Officer *de la* Legiond' Honneur (1924), Prime Minister, Marshal and Supreme Commander-in-Chief. *b* 8th July, 1863. *m.* 1st, 1878. ShriBada-MaharaniChandra Loka Bhakta Laksmi Devi, (Born, 1867) of a high Thakuri Kshatriya family of Nepal; died 1905; 2nd. 1905 Shri Bada-Maharani Balakumari Devi (Born 1888); eldest daughter of Colonel Hari Bikram Shah, a high Thakuri Kshatriya in the country. *Educ.:* Durbar High School, Katmandu, and is an alumni of the Calcutta University. Entered Army as a Colonel, became Major-General in the Nepal Army, 1882; General Commanding, Southern Division, 1887; Senior Commanding General (Western Command), Director of Public Instruction and in Charge of the Foreign Office of Nepal, 1887-1901; Appointed Commander-in-Chief of the Nepalese Army March 1901; Became Maharaja Prime Minister, Marshal and Supreme Commander-in-Chief of Nepal, June, 1901; Honorary General in the British Army, 1919; Honorary Colonel, 4th Gurkha Rifles, 1906; instituted the most Refulgent Order of the Star of Nepal and himself is Projjwala-Nepala-Taradhisha, *i.e.*, Grand Master of the most Refulgent Order, 1923; Visited England, 1908; Rendered magnificent help to Britain in men, money and materials during the war, 1914-18; Presented 31 Machine Guns to the King-Emperor on His Majesty's birthday, 1915; Substantial help to Britain during the Waziristan campaign and Third Kabul war, 1917-18; Concluded and signed a new Treaty of Friendship between the Governments of Nepal and Great Britain, 1923; Has effected decided administrative and other improvements in the country and has abolished slavery throughout the Kingdom after liberating 60,000 slaves at a cost of Rs. 35,00,000, 1924-26. *Publications:*—Has translated several military books into Nepalese. *Address:* Singha Durbar, Katmandu.

NEVILL, HENRY RIVERS, B.A.; O.B.E. (1919), V.D. (1920); C.I.E. (1921), Offg. Commissioner, Jhansi Division. *b.* 24th May 1876. *m.* Euphan M.B.E., *d.* of T. Maxwell, Esq., of Irvine, Ayrshire, *Educ.* Charterhouse, Oriel College, Oxford. Entered Indian Civil Service, 1899; posted to U.P.; Commanded U.P. Horse, 1913-17; services placed at disposal of C.-in-C., Nov. 1917; Asstt. Adjutant-General at A. H. Q. and from August 1921 to April 1923 Director of Auxiliary and Territorial Forces; Collector and Magistrate, Agra, Nov. 1923; *Publications:* Dist. Gazeteers of the United Provinces. *Address:* Jhansi.

NEWBOULD, HON. SIR BABINGTON BENNETT. Kt. (1924), Puisne Judge, High Court,

Calcutta, since 1916. *b.* 7 March 1867. *Educ.:* Bedford Sch.; Pembroke Coll., Cambridge. Ent. I.C.S., 1885. *Address:* Bengal United Service Club, Calcutta.

NICHOLSON, SIR FREDERICK AUGUSTUS, K.C.S.I. (1925); K.C.I.E. (1903); C.I.E. (1899); Kaisar-i-Hind Medal, First Class, 1st Jan. 1917. *b.* 1846. *m.* 1875, Catherine, O.B.E., *d.* of Rev. J. Lechler; three *s.* *Educ.:* Royal Medical College, Epsom; Lincoln Coll., Oxford. Entered Madras Civil Service, 1869; Member, Board of Revenue, Madras, 1899; Member, Viceroy's Legislative Council, 1897-99, 1900-02; reported on establishment of Agricultural Banks in India, 1895; Member of Famine Commission, 1901; retired, 1904; Hon. Director of Fisheries, 1905-1918. *Publications:* District Manual of Coimbatore; Land and Agricultural Banks for India; Madras Fisheries Bulletins; Note on Agriculture in Japan. *Address:* Surrenden, Coonoor, Nilgiris.

NIHAL SINGH, REV. CANON SOLOMON, B.A., Evangelistic Missionary. Chawhan Rajput of Mainpuri and Jagirdar by birth. *b.* 15 Feb. 1852. *m.* 1870 *d.* of Subahdar Sundar Singh, a Tilok Chandi Bais of Baiswara, three *s.* three *d.* *Educ.:* Govt. H. S., Lakhimpur; Canning Coll. Lucknow. ordained, 1891; Hon. Canon in All Saints' Cathedral, Allahabad, 1906. *Publications:* An English Grammar for the use of the middle classes in Oudh; Translation into English of the Urdu Entrance Course Majmua Sakhun, 1873-75; Khulasat-ul-Isaiah (in two parts); Risala-e-Saf Goi or Plain Speaking; Verses on Temperance in Urdu; Munajat Asi; Verses on the Coronation of King Edward VII and George V in Urdu. *Address:* 2. Pioneer Road, Allahabad.

NORMAND, ALEXANDER ROBERT, M.A., B.Sc. Ph.D., Prof. of Chemistry, Wilson Coll., Bombay. *b.* Edinburgh, 4 March 1880. *m.* 1909 Margaret Elizabeth Murray. *Educ.:* Royal H. S. and Univ., Edinburgh. *Address:* Wilson College, Bombay.

NORMAND, CHARLES WILLIAM BLYTH, M.A., D. SC., Director-General. of Observatories. *b.* 10th September 1889. *m.* to Alison McLennan. *Educ.* Royal High School and Edinburgh University. Carnegie Scholar and Fellow 191-1913; -Meteorologist, Simla, from 1013-1915 and 1919-1927; I.A.R.O., with Mesopotamian Expeditionary Force, 1916-19; mentioned in despatches, 1917; Director-General of Observatories, 1927. *Publications:* Articles in Chemical and Meteorological Journals. *Address:* Meteorological Office, Poona.

NORRIS, ROLAND VICTOR, D.Sc. (London). M.Sc. (Manchester), F.I.C., Professor of Biochemistry, Indian Institute of Science, Bangalore. *b.* 24 October 1887. *m.* Dorothy, only *d.* of Robert and Myriam Harrop, Manchester. *Educ.:* Ripon Grammar School and Univ. of Manchester. Schunck Research Assistant, Univ. of Manchester, 1909; Research Scholar, Lister Institute of Preventive Medicine, 1910-11; Beit Memorial Fellow, 1911-13; Physiological Chemist, Imperial Bacteriological Laboratory, Muktesar, U.P., 1914; war service, Captain I.A.R.O. attached 103rd Mahratta Light Infantry, 1915-18; Indian Agricultural Service: Agricultural Chemist to Govt. of Madras, 1918-24; appointed Prof. of Biochemistry, Indian Institute of Science, July 1924; Hon. General Secretary, Indian Science Congress. *Publications:* numerous scientific papers in various technical journals. *Address:* The Indian Institute of Science, Bangalore.

NORTON, EARDLEY, Bar.-at-Law (Lincoln's Inn). *b.* 19 Feb. 1852. Called 1876. *Educ.:* Rugby Sch.; Merton Coll., Oxford. Advocate of the High Courts of Bengal (1888); and Madras (1879). Member of the Legislative Assembly, as elected representative of the non-officials of Madras Presidency, 1921. *Address:* Bar Library, High Court, Calcutta.

NOYCE, FRANK, I.C.S., C.S.I. (1924). C.B.E., 1918; *b.* 4 June 1878. *Educ.* Salisbury Sch. and St. Catharine's Coll., Cambridge. *m.* Enid, *d.* of W. M. Kirkus of Liverpool. Entered I.C.S., 1902. Served in Madras. Under-Sec. to Govt. of India, Revenue and Agricultural Dept., 1912-16; Indian Cotton Committee, 1917-18; Controller of Cotton Cloth, 1918-29; Vice-President and subsequently President, Indian Sugar Committee, 1919-20; Member, Burma Land Revenue Committee, 1920-21; Indian Trade Commissioner in London, 1922-23; Secretary to the Government of Madras, Development Department, 1923-24; President, Indian Coal Committee, 1924-25. President Indian Tariff Board, (Cotton Textile Industry Enquiry), 1926. *Publications:* England, India and Afghanistan (1902). *Address:* Gorton Castle, Simla.

NUNAN, WILLIAM, B.A., T.C.D. (1902), M.B. B.Ch., T.C.D. (1905), M.D. (1906), Administrative Medical Officer, Bombay Port Trust. *b.* 26 Jan. 1880. *m.* Jeanne Honorine Thibault de Chanvalon, Paris. *Educ.:* Clongowes Wood College, Kildare; University of Dublin; Trinity College. Certifying Surgeon, Bombay. 1914; Coroner of Bombay, 1915-1919; Police Surgeon of Bombay; Prof. of Medical Jurisprudence, Grant Medical College, Bombay. *Publication.:* Lectures in Medical Jurisprudence: *Address.:* Dougall House, Colaba, Bombay.

OATEN, EDWARD FARLEY, M.L.C., M.A., LL.B., Director of Public Instruction, Bengal. *b.* 24 Feb. 1884. *m.* Dorothy Aileen Fegan 2nd *d.* of late E. G. Ellis. *Educ.* Skinner's School, Tunbridge Wells, Tonbridge School; Sidney Sussex College, Cambridge (Scholar). On staff Llandovery Coll., 1908-9; I.E.S. as Prof. of History, Presidency Coll., Calcutta, 1909-16; Trooper, Calcutta Light Horse to 1916; thence to 1919 in I.A.R.O. attached 11th K.E.O., Lancers in N. W. Frontier and n the Punjab, including Waziristan campaign, 1917; Lt., 1917; Ag. Captain, 1919; Offg. Asst. Director for Mahomedan Education, Bengal, 1919; Offg. Inspector of European Schools, Bengal, 1920; Offg. Principal, Hughli College, 1921; Asst. Director of Public Instruction, Bengal, 1921; Director of Public Instruction, Bengal, 1924; Nominated member, Bengal Legislative Council, 1924, to present day; Fellow, Calcutta University; Major, A. F. India 1927 in command of 2nd (Calcutta) Bn. University Training Corps. *Publications:*

"A sketch of Anglo-Indian Literature"; "European Travellers in India"; "Glimpses of India's History", contributed to "Cambridge History of English Literature." *Address:* United Service Club, Calcutta.

ORCHHA, H. H. SARAMAD-I-RAJAHA-I-BUNDELKHAND, MAHARAJA MAHINDRA SAWAI, SIR PRATAP SINGH BAHADUR, G.C.I.E., K.C.I.E., G.C.S.I. *b.* 1854. *s.* brother 1874. State has area of 2,080 sq. miles and population of over 300,000. *Address*: Tikamgarh, Bundelkhand.

PAGE, THE HON. MR. JUSTICE ARTHUR, K.C. (1922); Judge, High Court, Calcutta, 1923. *b.* 1876; *o. surv. s.* of late Nathaniel Page, J.P., Carshalton, Surrey. *m.* Margaret, *d.* of E. Symes Thomson, M.D., F.R.C.P. *Educ.:* Harrow; Magdalen Coll., Oxford. Classical Honours Moderations, 1897; Literae Humaniores, 1899; B.A. 1899. Bar-at-Law, 1901; Conservative Candidate, Derby Borough, Jan. 1910; served European War in France and Flanders, A.B., R.N.V.R. 1915; 2nd Lieut., Royal Marine Artillery; Captain, 1917. *Publications :* Licencing Bill, is it Just ? 1908; Shops Act (joint author), 1911; Legal Problems of the Empire in Oxford Survey of the British Empire, 1914; Imperialism and Democracy, 1913; War and Alien Enemies, 1914; various articles on Political and Social subjects; Harrow School cricket and football elevens and fives player. *Address :* High Court, Calcutta.

PAKENHAM-WALSH, RT. REV. HERBERT, D.D. (Dub.), Principal, Bishop's College, Calcutta. *b.* Dublin, 22 March 1871; 3rd son of late Rt. Rev. William Pakenham Walsh, Bishop of Ossory and Clara Jane Ridley. *m.* 1916, Clara Ridley, *y. d.* of Rev. Canon F. C. Hayes. *Educ.:* Chard Grammar School; Birkenhead School; Trinity College, Dublin. Deacon, 1896; worked as a member of the Dublin University Brotherhood, Chhota Nagpore, India, 1896-1903; Principal, S. P. G. College, Trichinopoly, 1904-07; Head of the S. P. G. Brotherhood, Trichinopoly; Warden, Bishop Cotton School, Bangalore, 1907-14; Bishop of Assam, 1915-23. *Publications :* St. Francis of Assisi and other poems; Nisbet, Altar and Table (S.P.C.K.); Evolution and Christianity (C.L.S.); Commentary on St. John's Ep. (S.P.C.K.); Daily Services for Schools and Colleges (Longman's) and Divine Healing (S.P.C.K.) *Address :* Bishop's College, 224 Lower Circular Road, Calcutta.

PALANPUR, NAWAB CAPTAIN H. H. ZUBDATUL-MULK DEWAN MAHAKHAN TALEY MUHAMMAD KHAN BAHADUR, K.C.I.E. (1920), K.C.V.O. (1922). *b.* July 7, 1883. State has area of 1,750 sq. miles and population of over 236,694. *Address :* Palanpur.

PAL, BIPIN CHANDRA, Journalist. *b.* 7 Nov. 1858. *Educ.:* Presidency College, Calcutta. Sub-Editor, "Bengal Public Opinion," 1883-84; Sub-Editor, "Tribune", 1887-88; Secretary and Librarian, Calcutta Public Library, 1890-92; License Inspector, Calcutta Corporation, 1892-93; visited England and America; worked as a Brahmo Missionary; started "New India," 1901 and afterwards "Bande Mataram'; convicted in 1907 to simple imprisonment for 6 months for contempt of court; left for England 1908 where he started "Swaraj" (monthly); in 1911 sentenced on landing at Bombay to simple imprisonment for one month on a charge of sedition; started "The Hindu Review" in 1912. *Address:* Calcutta.

PALITANA, THAKORE SAHEB OF, SHRI BAHADURSINHJI MANSINHJI (Gohel Rajput) *b.* 3 April 1900. Invested with full powers, 27th Nov. 1919. A member of the Chamber of Princes. A member of the Council of the Rajkot Rajkumar College. *Address :* Palitana.

PANANDIKAR, SATYASHRAYA GOPAL, M.A. (Bombay), 1916; Ph.D. (Econ. London), 1921; D. Sc. (Econ, London), 1926. Professor of History and Political Economy, Elphinstone College, Bombay. *b.* 18 July 1894. *m.* to Indira, *d.* of S. A. Sabnis, Esq., Solicitor, High Court, Bombay. *Educ :* Elphinstone College, Bombay and School of Economics, Univ. of London. Some time Professor of Political Economy University of Dacca (1921-23). *Publications*: Economic Consequences of the War for India; Wealth and Welfare of the Bengal Delta. *Address*: Elphinstone College, Fort, Bombay.

PANCKRIDGE, HUGH RAHERE, B.A., Barrister, Standing Counsel, Bengal. *b.* Oct. 2, 1885. *Educ.*: Winchester Coll., and Oriel Coll., Oxford. Called to Bar Inner Temple, 1909; Advocate, Calcutta High Court, 1910; Indian Army Reserve of Officers, 1914; Capt., 1918; mentioned in despatches by Field Marshal Lord Allenby; served in France and Palestine. *Address*: Bengal Club, Calcutta; and Oriental Club, Hanover Square, London.

PANDALAI, THE HON'BLE MR. JUSTICE K. KRISHNAN, B.A., B.L., Bar-at-Law, LL.D., (Lond.) 1914; Judge, High Court, Madras. *b.* April 1874. *m.* J. Narayani Amma. *Educ :* Mavelikara, Trivandrum and Madras. Practised law in the state of Travancore from 1896 to 1911. Proceeded to England and was called to the Bar in 1912. Judge, High Court, Travancore, 1913-14; awarded LL.D. by London University for thesis on Malabar Law. Practised at Madras 1914-19; appointed Judge, Small Cause Court, 1919; Chief Presidency Magistrate, 1924. Judge, High Court, 1928. *Publications :* Editor of Series of Science Primers in Malayalam; author of Primer on Chemistry; author or "Sucession and Partition in Malabar Law; joint author on Malabar Law. *Address :* Lanark Hall, Rundall's Road, Vepery, Madras.

PANNA, H. H. MAHENDRA MAHARAJA YADVENDRA SINGH OF; K.C.I.E. (1922). *b.* 1893. *S. cousin* on his deposition, 1902. *m.* 1912, Kunvari Shri Manhar Kunvarba, *o. d.* of Maharajah of Bhavnagar State. Has area of 2,596 sq. miles and population of about 200,000. *Address :* Panna, Bundelkhand.

PARANJPYE, GOPAL RAMCHANDRA, M. Sc., A.I.I.Sc., Professor of Physics, Royal Institute of Science, Bombay. *b.* 30 January 1891. *m.* Mrs. Malini Paranjpe. *Educ.*: Poona, Heidelberg and Berlin. Bombay University Research Scholar at Bangalore for three years; then for some time Assistant in the

Physical Chemistry Department of the Indian Institute of Science, Bangalore, since 1920; Professor of Physics in the Indian Educational Service at the Royal Institute of Science, Bombay. Fellow of the Univ. of Bombay. *Publications:* Papers on "The Cathode fall in several gases Helium Neon, etc."; "Vapour pressures of concentrated solutions;" "Elastic constants of certain materials"; "Use of neon lamp for intermittent illumination". "Use of Carbon Doyxide Gas in Mercury Interrupters." Joint Editor of the popular Scientific monthly in Marathi "Srishti-Dnyan." *Address:* Royal Institute of Science, Mayo Road, Bombay.

PARANJPYE, RAGHUNATH PURUSHOTTAM, DR., M.A. (Cantab.): B.Sc. (Bombay): D.Sc. (Calcutta). Member, India Council (1927). *b.* Murdi, 16 Feb. 1876. *Educ.:* Maratha H. S., Bombay; Fergusson Coll., Poona; St. John's Coll., Cambridge (Fell.); Paris and Gottingen; First in all Univ. exams. in India; went to England as Govt. of India scholar; bracketed Senior Wrangler at Cambridge, 1899; Princ. and Prof. of Math., Fergusson Coll., Poona, 1902-24; has taken prominent part in all social, political and educational movements in Bombay Pres.; Vice-Chancellor of new Indian Women's Univ., 1916-20; Bombay Leg. Council, 1913; represented the University of Bombay, 1916-23, 1926. Awarded the Kaisar-i-Hind Gold Medal in 1916. Minister, Bombay Government, 1921-23, 1927; Member, Reforms Inquiry Committee, 1924; Auxiliary and Territorial Forces Committee, 1924; Indian Taxation Inquiry Committee, 1924-25; Elected to Bombay Council to represent Univ. in 1926; appointed Minister, 1927; resigned on appointment to India Office. *Publications:* Short Lives of Gokhale and Karve. *Address:* India Office, Whitehall, London.

PARKER, EDWARD ARTHUR, M.A., PH.D., Dip. Ed. (B'ham); Ehrenmitglied der Universitat Graz (1920); J.P. (Bombay, 1927); Professor of English, Elphinstone College, Bombay. *b.* Oct. 22, 1889. *Educ:* School for the Sons of Missionaries, Blackheath, London, Birmingham University. Harding Travelling Scholar, Birmingham, 1911; Lektor for English, Graz University, Austria, 1913-14; Professor of English, Wilson Coll., Bombay, 1914-26; Fellow of Bombay Univ. and Member of the English Board of Studies, 1923; Hon. Secy., Bombay Branch, Royal Asiatic Society, Bombay, 1922-25 and 1926-28; Chairman, Board of Studies in English, Bombay University, 1927; Member of the Board of Directors, Prince of Wales Museum, 1925. *Publications*: Sixty-three Poems by Wilfrid Gibson with Critical Introduction (Macmillan); How to Understand Poetry (Macmillan); Longer Modern Verse with Introduction (O.U.P.); Editions of Selections from Ruskin's "Stones of Venice"; Browning's "Pippa Passes"; Browning's "Balaustion's Adventure." *Address*: Saira Cottage, Warden Road, Bombay 6.

PARTAB BAHADUR SING, RAJA, TALUQDAR OF KILA PARTABGARH, C.I.E., Hon. Magistrate; Hon. Mem. of U. P. Leg. Council; *b.* 1866. *Address:* Kila Partabgarh, Oudh.

PARTABGARH, H. H. SIR RAGHUNATH SINGH BAHADUR, MAHARAWAT OF; K.C.I.E. *b.* 1859. *s.* 1890. State has area of 886 sq. miles and population of 62,704; salute of 15 guns. *Address:* Partabgarh, Rajputana.

PASCOE, SIR EDWIN HALL, KT. (1928). M.A., Sc.D. (Cantab.), D. Sc. (London), F.G.S., F.A.S.B., Director Geological Survey of India since 1921: Editor, Memoirs and Records of the Geological Survey of India; Mining and Geological Institute of India, President in 1924, Treasurer and Editor of Transactions before and since; President of the Governing Body, Indian School of Mining and Geology; Corresponding Member, Imperial Mineral Resources Bureau; Trustee, Indian Museum, Calcutta; Member of Court and Council, Indian Institute of Science; *b.* 17 Feb. 1878. *m.* Mia, *d.* of James MacLean of Beauly, Inverness. *Educ.:* King's College and Univ. College, London; St. John's College, Cambridge (Foundation Scholar). Joined Geological Survey, 1905; Kangra Earthquake Investigation, 1905; Survey of Burma Oilfields, 1905-09; accompanied Makwari Punitive Expedition, Naga Hills, 1910; deputed Persian Gulf, Arabian Coast and W. Persia, 1913; Slade Oilfields Commission in Persia, and Persian Gulf, 1913-14; Punjab and N. W. Frontier, 1914-15; Commsn. as 2nd-Lt. in I.A.R.O., 1915.; on Active Service, Mesopotamia, 1916-17; promoted to Superintendent, Geological Survey of India, 1917; on Deputation to Mesopotamia, 1918-19. *Publications:* The Oilfields of Burma; The Petroleum Occurrences of Assam and Bengal; Petroleum in the Punjab and N. W. Frontier Province; Geological Notes on Mesopotamia, with special reference to occurrences of Petroleum; and several shorter papers in the Records, Geological Survey of India and elsewhere. *Address:* Geological Survey of India, 27, Chowringhee, Calcutta.

PATIALA, MAJOR-GENERAL HIS HIGHNESS FARZAND-I-KHAS-I-DAULAT-I-INGLISHIA MANSUR-I-ZAMAN AMIR-UL-UMRA MAHARAJA DHIRAJ RAJ RAJESHWAR SHRI MAHARAJA-I-RAJGAN BHUPINDER SINGH MOHINDER BAHADUR, Ruler of Patiala State, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., A.D.C., F.R.G.S., F.Z.S., M.R.A.S., M.R.S.A., F.R.C.I., F.R.H.S. *b.* Oct. 1891. The premier Ruling Prince of the Punjab; is one of the Ruling Princes of India; a member of the Standing Committee of Indian Princes Chamber (Narendra Mandal); Chancellor of the Chamber of Princes, 1926; Commander-in-Chief, Patiala Forces; Hon. Major-General in British Army, and Hon. Colonel, 15th Ludhiana Sikhs; served with Indian Expeditionary Force during European War, 1914, on the staff in France, Belgium, Italy and Palestine in 1918, Afghan War, 1919 (Grand Gross of the Legion de Honour, Grand Cross of the Order of the Crown of Italy, Grand Cordon of the Order de Leopold, Grand Cordon of the Order of the Nile, Grand Cross of the Order of the Crown of Roumania): represented India at the Imperial War Conference and Cabinet, 1918; represented Indian Princes on the League of Nations, 1925. *Cr.* G.C.I.E., 1911, G.B.E., 1918, G.C.S.I., 1921, G.C.V.O.,

1922; A.D.C. to His Majesty the King-Emperor, 1922.; received the order of Grand Cross of St. Saviour of Greece (1926). *Address:* (Winter) Patiala; (Summer) Chail, Simla Hills, Punjab, India.

PATTANI, SIR PRABHASHANKAR DALPATRAM, K.C.I.E., President of Council of Administration, Bhavnagar State, 1920; Member of Exec. Council of Government of Bombay, 1912-1915; of the Bombay Legislative Council, 1916; of the Imperial Legislative Council, 1917; of the Council of India, 1917-19. *b.* 1862. *Educ.*: Morvi, Rajkote, Bombay. *Address*: Anantwadi, Bhavnagar.

PATTERSON, STEWART BLACKELEY AGNEW, C.I.E. (1922), C.S.I. (1927), Agent to Governor-General in Rajputana and Chief Commissioner, Ajmer-Merwara. *b.* 1872. *m.* Augusta Rachel, *d.* of the late General Roberts. *Educ.:* Marlborough Coll., R.M.C.S. Sandhurst. Entered Queen's Royal Regt., 1892; 30th Dogras, 1894; served in Waziristan Expedition, 1894-5; (Medal and Clasp), N. W. Frontier, Malakand, Chakdara, Mamad Valley, 1897-8; (Medals and two Clasps); subsequently served in Political Department, Govt. of India, in N. W. Frontier, Kashmir and Rajputana; acted as Political Secretary to Govt. of India and was appointed A.G.G. in Rajputana in 1925. *Address:* The Residency, Mount Abu.

PAUL, KANAKARAYAN TIRUSELVAM, O. B. E. (1918), Nat. Sec., Y. M. C. A. of India; Burma and Ceylon. *b.* 24 March 1876. *Educ.*; Madras Christian College; Law College; Teachers' College. *m.* Miss K. Narasinga Rao. Teacher, Headmaster, College Lecturer. Municipal Commissioner, General Secretary, N.M.S. of India; Member, Fraser Commission on Village Education in India; President, all-India Christian Conference, 1923; Moderator, General Assembly of the South India United Church, 1925-27. Vice-President, World Student Christian Federation, 1926-28 *Publications:* "Citizenship in Modern India. *Adult Education* An Urgent Need of Modern India " The British Connection with India." Editor, *Young Men of India*. *Address:* 5, Russell Street, Calcutta.

PEARS, STEUART EDMUND, C.I.E. (1916), C.S.I. (1923), Resident in Mysore. *b.* 25 Nov. 1875. *m.* Winifred M. Barton. *Educ.*: Edinburgh University and Trinity Hall Cambridge. Entered Indian Civil Service, 1898; served in N.W.F. Province from 1901 onwards, as Political Agent in Tochi, Kurram, Khyber and Malakand. Delegate to Anglo-Afghan Conference at Mussoorie in 1920: Resident in Waziristan, 1922-24; Offg. A. G. G. in Baluchistan, May to October 1924; Resident in Mysore (June 1925). *Address:* Bangalore, Southern India.

PERCIVAL, PHILIP EDWARD, B.A. (Oxon.) Bar-at-Law, C.I.E., I.C.S., Judicial Commissioner of Sind. *b.* 11, November, 1872. *m.* Sylvia Baines, *d.* of the late Sir J. A. Baines, C.S.I., *Education:* Chartered-house and Balliol College, Oxford. Served under the Government of Bombay as Asstt. Collr., Asstt. Judge, Under-Secretary, Judicial Dept., Registrar, Bombay High Court, Dist. and Sessions Judge, Acting High Court Judge. and Remembrancer of Legal Affairs. *Address:* Karachi.

PERIER, MOST REV. FERDINAND, S.J., Catholic Archbishop of Calcutta, since 1924. *b.* Antwerp, 22 Sept. 1875. Joined Society of Jesus, 1897, nominated Superior of Jesuit Mission in Bengal, 1913. Consecrated Coadjutor Bishop, Dec. 1921. Officer, Order of the Crown; Knight Commander, Order of Leopold. *Address:* 32, Park Street, Calcutta.

PERINI, RT. REV. PAUL, S.J., D.D., Bishop of Calicut, since June 1923. *b.* Brandola, Italy, Jan. 1867. *Educ.:* various Colleges of Society of Jesus in Austria, England and Belgium. Joined Society of Jesus, 1883; Rector and Prin. of St. Aloysius Coll., Mangalore, for six years; Bishop of Mangalore, 1910-23. *Address:* Bishop's House, Calicut.

PETIT, SIR DINSHAW MANOCKJEE, 2nd Baronet; *s.* of late Framjee Dinshaw Petit. 2nd son of 1st Baronet. *b.* 7 June 1873, *s.* his grandfather, Sir Dinshaw Manockjee, under special remainder, 1901, and changed his name from Jeejeebhoy Framji Petit to Dinshaw Manockjee Petit. Merchant and cotton millowner; at one time Member, Bombay Legislative Council; J.P. for Bombay; a Delegate of Parsee Ch. Matrimonial Court of Bombay; Pres. of Association for Amelioration of Poor Zoroastrians in Persia; the Petit Charity Funds, Petit Institute, and Parsee Orphanage, and Chairman and Member of Managing Committees of the principal Parsee charitable institutions in Bombay. *m.* Dinbai, *d.* of Sir Jamsetjee Jejeebhoy. 3rd Bart., and has issue. *Address:* Petit Hall, Malabar Hill, Bombay.

PETIT, JEHANGIR BOMANJEE, Merchant and millowner. *b.* 21 Aug. 1879. *m.* Miss Jaijee Sorabjee Patuck, M.B.E. Kaisar-i-Hind Silver medallist. *Educ.:* Fort High and St. Xavier's Institutions. J.P., merchants and mill-agent Member, Bombay Municipal Corporion, The Bombay Improvement-Trust Board; Bombay Development Board and the Victora Jubilee Technical Institute; Member of the Committee of the Bombay Millowners' Association (President, 1915-16, and 1928-29) Indian Merchants' Chamber (President. 1919-20) and Indian Industrial Conference (President, 1918); President, Bombay Textile Association; *Vice* President, Bombay Presidency Assocn.; Trustee of Parsee Panchayat, Founder and Proprietor of *The Indian Daily Mail:* Founder and President of the B. D. Petit Parsi General Hospital, Indian Economic Society, Bombay Progressive Association, Bombay Symphony Orchestra, Tariff Reform League, Landlord's Association and New High School for Girls (Bombay); Founder and Honorary Secretary, of the Imperial Indian Citizenship Association and the Victoria Memorial School for the Blind ; Delegates of the Parsi Chief Matrimonial Court (1902-1922); Member of Bombay Legislative Council (1921-1923 and 1927-29). Excise Committee (1921-24), Indigenous Industries Committee (1915-1917), Industrial Disputes Committee (1921), and the University Reforms Committee (1924). *Address:* Mount Petit, Pedder Road, Cumballa Hill, Bombay.

PETMAN, CHARLES EARLE BEVAN, C.I.E. *b.* 9 September 1866. *m.* 1926, Amy, widow of John William Hensley, deceased, late Director of Indian Govt. Telegraphs and *d*

of Rev. Edwin Pope deceased, formerly Vicar of Paddock Wood, Kent and Rector of Latchingdon, Essex *Educ:* Privately and at Trinity College, Cambridge, Advocate, Calcutta H. Court, 1892, and of Chief Court, Punjab, 1892. Government Advocate, Punjab, 1909 ; Judge of the High Court, Lahore, from April to Aug. 1920 and from Octr. 1920 to Febr. 1921. *Publications:* "Report on Frauds and Bribery in the Commissariat Department"; "P. W. D. Contract Manual" (Revised Edition). *Address:* Lahore.

PETRIE, DAVID, C.I.E., C.V.O., C.B.E., Director, Intelligence Bureau, Home Department, Government of India, 1924. *b.* 1879. *Educ.:* Aberdeen Univ. Ent. Ind. Police, 1900 ; Asst. Dir., C.I.D., Simla, 1911-12 ; Spec. duty with Home Dept., since 1915; on special duty with H.R.H. the Duke of Connaught, 1921 ; on staff of H. R. H. the Prince of Wales, 1921-22; Senior Superintendent of Police, Lahore, Member of the R. Commn. on Public Services, 1923. *Address:* C/o Lloyds Bank, Bombay.

PIYARE LAL, LALA, M.L.A., Gold Medallist in Law (1880), Punjab Univ., Vakil, High Court. *b.* 21 Aug. 1858. *Educ.:* Delhi Govt. College; Lahore Govt. College. President, Delhi Bar Association. Had been a member of the All-India Congress Committee before the introduction of Civil Disobedience; Vice-President, Municipal Committee, Delhi; Hon. Secretary, Board of Trustees, Hindu College, Delhi; Member, Executive Council, Delhi Univ.; represented Delhi province in the Imperial War Conference at Delhi in 1918. Represented Delhi General Constituency in the Legislative Assembly from 1924-26; is connected with various Jain Institutions. *Address:* Chandni Chowk, Delhi.

POCHKHANAWALA, SORABJI NUSSERWANJI Certificated Associate of the Institute of Bankers (London), 1910; Managing Director, Central Bank of India, Ltd. *b.* 9 Aug. 1881. *m.* Bai Sakerbai Ruttonji. *Educ:* New High School and St. Xavier's College, Bombay. Joined Chartered Bank of India, Australia and China and after serving the Bank for 7 years and the Bank of India for 5 years; founded the Central Bank of India. Was appointed member of the Government Securities Rehabilitation Committee by the Govt. of India in 1921. *Address*: New Worli Reclamation, Worli, Bombay.

POSA, MAUNG, I.S.O. (1911), K.S.M. 1893. *b.* Toungoo, 13 May 1862. *Educ.:* St. Paul's R.C.M. Sch., Toungoo. Asstt. to Civil Officer;. Ningyai Column II, B. Expeditionary Field Force, 1885-87; Burma Medal with clasp, 1885-87. Senior Member, Burma Provincial Judicial ser. since 1911. Interpreter to Prince of Wales during visit to Burma Jan. 1906. Also to three Viceroys, 1898, 1901, 1908; Dist. Judge, 1916; Offg. Divisional Sessions Judge, 1918; Retired, June 1918; Asstt. Dir. Recruiting, July to Dec. 1918. Mentioned in despatches. *Address.:* Thaton.

PRADHAN, GOVIND BALWANT, B.A., LL.B., Finance Member Government of Bombay 1928. *b.* May 1874, *m.* Ramabai, *d.* of Mr. P.B. Pradhan retired Assistant Engineer. *Educ:* B. J. High School, Thana; Elphinstone College; and Govt. Law School, Bombay. Practised at Thana; became Public Prosecutor of Kolaba, 1907; resigned in 1920; for 20 years a member of Thana Municipality, for several years its Vice-President and for 7 years its elected President; Member of District Local Board, Thana, for 3 years; was one of the Directors of Thana Dt. Co-operative Credit Bank; President, Thana Dist. Boy Scout Movement; is one of the Vice-Presidents of the Chandrasena Kayastha Prabhu community elected at the Indore Parishad; elected to the Bombay Council in 1924; re-elected in 1926 by the Thana and Bombay Suburban Districts Non-Mahomedan Rural Constituency; Minister of Forest and Excise 1927-28. *Address:* Balvant Bag, Thana, and "Fintona", Narayan Dabholkar Road, Malabar Hill, Bombay.

PRASAD, GANESH, M.A. (Cantab.), D.Sc.; Hardinge Professor of Higher Mathematics in the Calcutta University; Life President of the Benares Mathematical Society; President, Calcutta Mathematical Society; Patron, Allahabad University Math. Assocn. *b.* 15th Nov. 1876. *Educ.:* Ballia; Allahabad; Cambridge; Gottingen. Member of Court, Council and Senate, Hindu Univ; (1924); Member of Court, Executive and Academic Councils and Faculty of Science, Allahabad Univ.; Fellow of Calcutta University and Vice-President, Indian Association for Cultivation of Science; Member of the Senate and Ex-Council. Agra University. *Publications:* "Constitution of Matter and Analytical Theroies of Heat." (Berlin, 1903) text-books on Differential Calculus and Integral Calculus (London, 1909 and 1910); "Mathematical Research in the last twenty years" (Berlin, 1922); "The place of partial differential equations in Mathematical Physics" (Calcutta, 1924); "An Indroduction to the theory of elleptic functions and higher transcendentals" (Calcutta, 1928); "Lectures on recent researches in the theory of Fourier series" (Calcutta, 1928). and many other original papers published in the mathematical and scientific journals of England, Germany, Italy and India during 1900-1924. *Address:* 2, Sama vaya Mansions, Corporation Street, Calcutta; and 37, Benares Cantt.

PRASAD, THE HON. JUSTICE SIR JWALA, B.A., LL.B., Puisne Judge, Patan High Court, since 1916; Acting Chief Justice, 1921. *b.* 25th March 1875, son of Babu Jagdan Sahay, late Deputy Collector and Magistrate of Bhardara, Pregana Behea, Bihar and Orissa *m.* 1888, *d.* of Munsif Mangul Sen Singh, Zamindar and retired Dy. Commissioner. *Educ.:* Arrah Zillah School, Patna College, Calcutta Univercity; Muir Central College and Allahabad University. B.A. 1st Class Honours and Jubilee Medalest 1893, LL.B., and Jubilee Bursary 1895. Vakil Calcutta and Allahabad High Courts, Government Pleader, Sahabad, 1903. Vice-Chairman, Local Board, 1904. Member of Sahabad District Board, 1904. Secretary of Government, Arrah Zillah School, 1908; Founded Purdah Girls' School at Arrah, 1913. Mangurated Zillah School Boarding House, 1913. Fellow of Patna University. Member of Syndicate and of the Faculty of Land and Board of Examiners in Law. President, League of Educationists President, All India Kayastha Conference, 1915. Rai Saheb, 1914; Rai Bahadur, 1915. Ag. Chief Justice

in 1924. Ag. Chief Justice, 1926. *Address:* Patna.

PRENTICE, WILLIAM DAVID RUSSELL, M.A. (Hon. in Classics), Edinburgh, C.I.E. (1928) I.C.S.; Chief Secretary to Govt. of Bengal *b.* 5th September 1877. *m.* Florence Mary, youngest *d.* of J. F. Kane (died). *Educ;* George Watson's College, Fettes, Edinburgh University, and Christ Church, Oxford. *Address* : United Service Club, Calcutta

PRICE, EDWIN LESSWARE, B..A (Oxon), Bar.-at-Law, C.I.E., O.B.E,. F.R.E.S. Merchant, French Consular Agent at Karachi since 1914. *b.* 8th July 1874. Member, Legislative Assembly. 1920-21. Municipal Councillor, Karachi, since 1926. *Address:* "Newcroft", Ghizri Road, Karachi.

PUDUKOTTAI, H. H. RAJA MARTANDA BHAIRAVA TONDIMAN BAHADUR, RAJA OF, G.C.I.E., *b.* 1875; *s.* grandfather. 1886, *m.* 1915. State has area of 1,179 sq. miles, and population of 426,813 and had been ruled by Tondiman dynasty from time immemorial. Salute 11 guns. *Address:* La Favorite, Cannes, A. M. France.

PUDUMJEE, NOWROJEE, 1st Class Sardar of Deccan, Bombay; C.I.E. *b.* 1841. *Educ.*: Poona Coll. under Sir Edwin Arnold, war mem. of Bombay Leg. Council; Promoter and Chairman of several Industrial and Banking Companies. *Address:* Pudumjee House, Poona.

PURSHOTAMDAS THAKURDAS, SIR, KT. (1923), C.I.E. (1919), M.B.E. Non-Official Member, Indian Legislative Assembly (Indian Commerce), Cotton Merchant. *b.* 30th May 1879; *Educ.:* Elph. Coll., Bombay. President, East Indian Cotton Association; Member, Lord Inchcape's Retrenchment Committee; Governor, Imperial Bank of India; Member, Royal Commission on Indian Currency and Finance (1926). *Address:* Malabar Castle, The Ridge, Bombay.

PURVES, ROBERT EGERTON, C.I.E.; P. W. D., retired *b.* 1859 *Educ.:* Thomason Coll., Roorkee; Ex. Eng., 1895; Supdt. Eng., 1907; Ch. Eng. and Sec. to Govt., Punjab Irrigation Branch, 1913-14; retired, 1914; since practising as Hydraulic Eng. and Irrigation Expert. *Address :* c/o Messrs. King Hamilton & Co., Calcutta.

QUILON, BISHOP OF; *see* BENZIGER, RT. REV. A. M.

RADHANPUR. H. H. MAHOMED JALALUDHINKHAN BABI, BAHADUR, NAWAB OF. *b.* 1st April 1889; Pathan, Babi, Mahomedan. *Educ.:* Rajkumar Coll., Rajkot. *S.* brother, 1910. State has area of 1,150 sq. miles, and population of 67,789. Salute 11 guns. *Address:* Radhanpur.

RAFAEL, HENRY, THE REV., S.J., D.Sc., Mathematics (Madrid) 1905, Ph. D. (Madrid) 1915; D.D. (Barcelona) 1919, Professor of Mathematics, St. Xavier's College. *b.* 10th November 1885—Barcelona (Spain). *Educ:* University of Barcelona 1900-1904; University of Madrid 1905; University of Madrid 1913-1915; University of Barcelona 1915-1919. Assistant Professor (Govt. Service) University of Barcelona 1905-08: Joined the Society of Jesus on 1st October 1908. Priest on 31st July 1918. Director of the Magnetic Department—Observatorio del Ebro (Tortosa) Spain; Professor of Mathematics and Mathematical Physics Institute of Arts and Industries, Madrid, 1921-23; Professor of Mathematics at St. Xavier's College (1924). *Publications :* Doctoral Thesis: Solucion of generalizacion del Problema de Malfatti (1905); several articles in the Spanish Mathematical Review "Revista Matematica"; several articles in the Catalan Mathematical Review "Arxius del Institute de Cienciesi"; Several articles in the Spanish Scientific "Review Iberica"; eight lectures on Theory of Relativity in the Spanish Review "Anales de la Sociedad de Ingenieros del Instituto de Madrid". *Address :* St. Xavier's College, Bombay.

RAHIM, THE HON. SIR ABDUR, M.A., KT. (1919); *b.* September, 1867. *m.* Nisar Fatima Begum. *Educ.*: Government High School, Midnapore Presidency College, Calcutta. Called to the Bar (Middle Temple), 1890; practised as Advocate, Calcutta; Presidency Magistrate, Calcutta, 1900-03; Fellow, Madras University, since 1908; Member of the R. Commission on Public Services, 1913-15; officiated as Chief Justice, Madras, July-October 1916, and July to October 1919. *Publication :* "Principles of Mahomedan Jurisprudence." *Address :* College Bridge House, Egmore, Madras.

RAHIMTOOLA, SIR IBRAHIM, K.C.S.I., C.I.E. *b.* May 1862; was Mem. of Imp. Council; Mem., Bombay Leg. Council; Mem., Exec. Council, Bombay; President, Bombay Legislative Council (1923). *Address :* Pedder Road, Cumballa Hill, Bombay.

RAINY, SIR GEORGE, K.C.I.E. (1925), C.S.I. (1921), C.I.E. (1918); Member of the Viceroy's Council, Commerce and Railway, 1927. *b.* 11th Feb. 1875. *Educ.*: Edinburgh Academy and Merton Coll., Oxford. Entered I.C.S., 1899; Under-Sec. to Govt. of India, Commerce and Industries Dept. 1906-09; Member, Imperial Delhi Committee, 1914-16; Dy. Sec. to Govt. of India, Finance Dept., 1916-19; Chief Secretary to the Government of Behar and Orissa, 1919-20. President of the Indian Tariff Board, 1923-25. *Address* : Inverarm, Simla.

RAJKOT, THAKOR SAHEB, SIR LAKHAJI RAJ BAWAJI RAJ, K.C.I.E. *b.* 17th Dec. 1885. *Educ:* Rajkumar Coll., Rajkot. State has area of 282 sq. miles, and population of 60,993. Salute of 9 guns. *Address :* Rajkot.

RAJPIPLA, CAPTAIN HIS HIGHNESS MAHARANA SHRI VIJAYSINH, MAHARAJA OF, K.C.S.I. (1925). *b.* 1890. *s.* to the gadi in 1915. *Educ.:* at Rajkumar Coll., Rajkot, and subsequently with the Imperial Cadet Corps in Dehra-Dun. Enjoys permanent hereditary salute of 13 guns. *Address :* Rajpipla, Rajpipla State.

RAJWADE, MAJOR-GENERAL GANPATRAO RAGHUNATH RAO RAJA, MASHIR-I-KHAS BAHADUR SAUKAT-JUNG, C.B.E., A.D.C., Army Member, Gwalior Govt., and Inspector-General, Gwalior Army; Member of this

of Rev. Edwin Pope deceased, formerly Vicar of Paddock Wood, Kent and Rector of Latchingdon, Essex *Educ.:* Privately and at Trinity College, Cambridge, Advocate, Calcutta H. Court, 1892, and of Chief Court, Punjab, 1892. Government Advocate, Punjab, 1909; Judge of the High Court, Lahore, from April to Aug. 1920 and from Octr. 1920 to Febr. 1921. *Publications:* "Report on Frauds and Bribery in the Commissariat Department"; "P. W. D. Contract Manual" (Revised Edition). *Address:* Lahore.

PETRIE, DAVID, C.I.E., C.V.O., C.B.E., Director, Intelligence Bureau, Home Department, Government of India, 1924. *b.* 1879. *Educ.:* Aberdeen Univ. Ent. Ind. Police, 1900; Asst. Dir., C.I.D., Simla, 1911-12; Spec. duty with Home Dept., since 1915; on special duty with H.R.H. the Duke of Connaught, 1921; on staff of H. R. H. the Prince of Wales, 1921-22; Senior Superintendent of Police, Lahore, Member of the R. Commn. on Public Services, 1923. *Address:* C/o Lloyds Bank, Bombay.

PIYARE LAL, LALA, M.L.A., Gold Medallist in Law (1880), Punjab Univ., Vakil, High Court. *b.* 21 Aug. 1858. *Educ.:* Delhi Govt. College; Lahore Govt. College. President, Delhi Bar Association. Had been a member of the All-India Congress Committee before the introduction of Civil Disobedience; Vice-President, Municipal Committee, Delhi; Hon. Secretary, Board of Trustees, Hindu College, Delhi; Member, Executive Council, Delhi Univ.; represented Delhi province in the Imperial War Conference at Delhi in 1918. Represented Delhi General Constituency in the Legislative Assembly from 1924-26; is connected with various Jain Institutions. *Address:* Chandni Chowk, Delhi.

POCHKHANAWALA, SORABJI NUSSERWANJI Certificated Associate of the Institute of Bankers (London), 1910; Managing Director, Central Bank of India, Ltd. *b.* 9 Aug. 1881. *m.* Bai Sakerbai Ruttonji. *Educ:* New High School and St. Xavier's College, Bombay. Joined Chartered Bank of India, Australia and China and after serving the Bank for 7 years and the Bank of India for 5 years; founded the Central Bank of India. Was appointed member of the Government Securities Rehabilitation Committee by the Govt. of India in 1921. *Address:* New Worli Reclamation, Worli, Bombay.

POSA, MAUNG, I.S.O. (1911), K.S.M. 1893. *b.* Toungoo, 13 May 1862. *Educ.:* St. Paul's R.C.M. Sch., Toungoo. Asstt. to Civil Officer;. Ningyai Column II, B. Expeditionary Field Force, 1885-87; Burma Medal with clasp, 1885-87. Senior Member, Burma Provincial Judicial ser. since 1911. Interpreter to Prince of Wales during visit to Burma Jan. 1906. Also to three Viceroys, 1898, 1901, 1908; Dist. Judge, 1916; Offg. Divisional Sessions Judge, 1918; Retired, June 1918; Asstt. Dir. Recruiting, July to Dec. 1918. Mentioned in despatches. *Address.:* Thaton.

PRADHAN, GOVIND BALWANT, B.A., LL.B., Finance Member Government of Bombay 1928. *b.* May 1874, *m.* Ramabai, *d.* of Mr. P.B. Pradhan retired Assistant Engineer. *Educ.:* B. J. High School, Thana; Elphinstone College; and Govt. Law School, Bombay. Practised at Thana; became Public Prosecutor of Kolaba, 1907; resigned in 1920; for 20 years a member of Thana Municipality, for several years its Vice-President and for 7 years its elected President; Member of District Local Board, Thana, for 3 years; was one of the Directors of Thana Dt. Co-operative Credit Bank; President, Thana Dist. Boy Scout Movement; is one of the Vice-Presidents of the Chandrasena Kayastha Prabhu community elected at the Indore Parishad; elected to the Bombay Council in 1924; re-elected in 1926 by the Thana and Bombay Suburban Districts Non-Mahomedan Rural Constituency; Minister of Forest and Excise 1927-28. *Address:* Balvant Bag, Thana, and "Fintona" Narayan Dabholkar Road, Malabar Hill, Bombay.

PRASAD, GANESH, M.A. (Cantab.), D.Sc.; Hardinge Professor of Higher Mathematics in the Calcutta University; Life President of the Benares Mathematical Society; President, Calcutta Mathematical Society; Patron, Allahabad University Math. Assocn. *b.* 15th Nov. 1876. *Educ.:* Ballia; Allahabad; Cambridge; Gottingen. Member of Court, Council and Senate, Hindu Univ. (1924); Member of Court, Executive and Academic Councils and Faculty of Science, Allahabad Univ.; Fellow of Calcutta University and Vice-President, Indian Association for Cultivation of Science; Member of the Senate and Ex-Council, Agra University. *Publications:* "Constitution of Matter and Analytical Theroies of Heat." (Berlin, 1903) text-books on Differential Calculus and Integral Calculus (London, 1909 and 1910); "Mathematical Research in the last twenty years" (Berlin, 1922); "The place of partial differential equations in Mathematical Physics" (Calcutta, 1924); "An Indroduction to the theory of elleptic functions and higher transcendentals" (Calcutta, 1928); "Lectures on recent researches in the theory of Fourier series" (Calcutta, 1928). and many other original papers published in the mathematical and scientific journals of England, Germany, Italy and India during 1900-1924. *Address:* 2, Sama vaya Mansions, Corporation Street, Calcutta; and 37, Benares Cantt.

PRASAD, THE HON. JUSTICE SIR JWALA, B.A., LL.B., Puisne Judge, Patan High Court, since 1916; Acting Chief Justice, 1921. *b.* 25th March 1875, son of Babu Jagdan Sahay, late Deputy Collector and Magistrate of Bhardara, Pregana Behea, Bihar and Orissa *m.* 1888, *d.* of Munsif Mangul Sen Singh, Zamindar and retired Dy. Commissioner. *Educ.:* Arrah Zillah School, Patna College, Calcutta Univercity; Muir Central College and Allahabad University. B.A. 1st Class Honours and Jubilee Medalest 1893, LL.B., and Jubilee Bursary 1895. Vakil Calcutta and Allahabad High Courts, Government Pleader, Sahabad, 1903. Vice-Chairman, Local Board, 1904. Member of Sahabad District Board, 1904. Secretary of Government, Arrah Zillah School, 1908; Founded Purdah Girls' School at Arrah, 1913. Mangurated Zillah School Boarding House, 1913. Fellow of Patna University. Member of Syndicate and of the Faculty of Land and Board of Examiners in Law. President, League of Educationists President, All India Kayastha Conference, 1915. Rai Saheb, 1914; Rai Bahadur, 1915. Ag. Chief Justice

in 1924. Ag. Chief Justice, 1926. *Address:* Patna.

PRENTICE, WILLIAM DAVID RUSSELL, M.A. (Hon. in Classics), Edinburgh, C.I.E. (1928) I.C.S.; Chief Secretary to Govt. of Bengal *b.* 5th September 1877. *m.* Florence Mary, youngest *d.* of J. F. Kane (died). *Educ;* George Watson's College, Fettes, Edinburgh University, and Christ Church, Oxford. *Address:* United Service Club, Calcutta

PRICE, EDWIN LESSWARE, B..A (Oxon), Bar.-at-Law, C.I.E., O.B.E,. F.R.E.S. Merchant, French Consular Agent at Karachi since 1914. *b.* 8th July 1874. Member, Legislative Assembly. 1920-21. Municipal Councillor, Karachi, since 1926. *Address:* "Newcroft", Ghizri Road, Karachi.

PUDUKOTTAI, H. H. RAJA MARTANDA BHAIRAVA TONDIMAN BAHADUR, RAJA OF, G.C.I.E., *b.* 1875; *s.* grandfather. 1886, *m.* 1915. State has area of 1,179 sq. miles, and population of 426,813 and had been ruled by Tondiman dynasty from time immemorial. Salute 11 guns. *Address:* La Favorite, Cannes, A. M. France.

PUDUMJEE, NOWROJEE, 1st Class Sardar of Deccan, Bombay; C.I.E. *b.* 1841. *Educ.:* Poona Coll. under Sir Edwin Arnold, war mem. of Bombay Leg. Council; Promoter and Chairman of several Industrial and Banking Companies. *Address:* Pudumjee House, Poona.

PURSHOTAMDAS THAKURDAS, SIR, KT. (1923), C.I.E. (1919), M.B.E. Non-Official Member, Indian Legislative Assembly (Indian Commerce), Cotton Merchant. *b.* 30th May 1879; *Educ.:* Elph. Coll., Bombay. President, East Indian Cotton Association; Member, Lord Inchcape's Retrenchment Committee; Governor, Imperial Bank of India; Member, Royal Commission on Indian Currency and Finance (1926). *Address:* Malabar Castle, The Ridge, Bombay.

PURVES, ROBERT EGERTON, C.I.E.; P. W. D., retired *b.* 1859 *Educ.:* Thomason Coll., Roorkee; Ex. Eng., 1895; Supdt. Eng., 1907; Ch. Eng. and Sec. to Govt., Punjab Irrigation Branch, 1913-14; retired, 1914; since practising as Hydraulic Eng. and Irrigation Expert. *Address:* c/o Messrs. King Hamilton & Co., Calcutta.

QUILON, BISHOP OF; *see* BENZIGER, RT. REV. A. M.

RADHANPUR. H. H. MAHOMED JALALUDHINKHAN BABI, BAHADUR, NAWAB OF. *b.* 1st April 1889; Pathan, Babi, Mahomedan. *Educ.:* Rajkumar Coll., Rajkot. *S.* brother, 1910. State has area of 1,150 sq. miles, and population of 67,789. Salute 11 guns. *Address:* Radhanpur.

RAFAEL, HENRY, THE REV., S.J., D.Sc., Mathematics (Madrid) 1905, Ph. D. (Madrid) 1915; D.D. (Barcelona) 1919, Professor of Mathematics, St. Xavier's College. *b.* 10th November 1885—Barcelona (Spain). *Educ:* University of Barcelona 1900-1904; University of Madrid 1905; University of Madrid 1913-1915; University of Barcelona 1915-1919. Assistant Professor (Govt. Service) University of Barcelona 1905-08: Joined the Society of Jesus on 1st October 1908. Priest on 31st July 1918. Director of the Magnetic Department—Observatorio del Ebro (Tortosa) Spain; Professor of Mathematics and Mathematical Physics Institute of Arts and Industries, Madrid, 1921-23; Professor of Mathematics at St. Xavier's College (1924). *Publications:* Doctoral Thesis: Solucion of generalizacion del Problema de Malfatti (1905); several articles in the Spanish Mathematical Review "Revista Matematica"; several articles in the Catalan Mathematical Review "Arxius del Institute de Cienciesi"; Several articles in the Spanish Scientific "Review Iberica"; eight lectures on Theory of Relativity in the Spanish Review "Anales de la Sociedad de Ingenieros del Instituto de Madrid". *Address:* St. Xavier's College, Bombay.

RAHIM, THE HON. SIR ABDUR, M.A., KT. (1919); *b.* September, 1867. *m.* Nisar Fatima Begum. *Educ.:* Government High School, Midnapore Presidency College, Calcutta. Called to the Bar (Middle Temple), 1890; practised as Advocate, Calcutta; Presidency Magistrate, Calcutta, 1900-03; Fellow, Madras University, since 1908; Member of the R. Commission on Public Services, 1913-15; officiated as Chief Justice, Madras, July-October 1916, and July to October 1919. *Publication:* "Principles of Mahomedan Jurisprudence." *Address:* College Bridge House, Egmore, Madras.

RAHIMTOOLA, SIR IBRAHIM, K.C.S.I., C.I.E. *b.* May 1862; was Mem. of Imp. Council; Mem., Bombay Leg. Council; Mem., Exec. Council, Bombay; President, Bombay Legislative Council (1923). *Address:* Pedder Road, Cumballa Hill, Bombay.

RAINY, SIR GEORGE, K.C.I.E. (1925), C.S.I. (1921), C.I.E. (1918); Member of the Viceroy's Council, Commerce and Railway, 1927. *b.* 11th Feb. 1875. *Educ.:* Edinburgh Academy and Merton Coll., Oxford. Entered I.C.S., 1899; Under-Sec. to Govt. of India, Commerce and Industries Dept. 1906-09; Member, Imperial Delhi Committee, 1914-16; Dy. Sec. to Govt. of India, Finance Dept., 1916-19; Chief Secretary to the Government of Behar and Orissa, 1919-20. President of the Indian Tariff Board, 1923-25. *Address:* Inverarm, Simla.

RAJKOT, THAKOR SAHEB, SIR LAKHAJI RAJ BAWAJI RAJ, K.C.I.E. *b.* 17th Dec. 1885. *Educ:* Rajkumar Coll., Rajkot. State has area of 282 sq. miles, and population of 60,993. Salute of 9 guns. *Address:* Rajkot.

RAJPIPLA, CAPTAIN HIS HIGHNESS MAHARANA SHRI VIJAYSINH, MAHARAJA OF, K.C.S.I. (1925). *b.* 1890. *s.* to the gadi in 1915. *Educ.:* at Rajkumar Coll., Rajkot, and subsequently with the Imperial Cadet Corps in Dehra-Dun. Enjoys permanent hereditary salute of 13 guns. *Address:* Rajpipla, Rajpipla State.

RAJWADE, MAJOR-GENERAL GANPATRAO RAGHUNATH RAO RAJA, MASHIR-I-KHAS BAHADUR SAUKAT-JUNG, C.B.E., A.D.C., Army Member, Gwalior Govt., and Inspector-General, Gwalior Army; Member of this

Council of Regency; ranks as First Class Sardar in the Bombay Presidency. *b.* Jan. 1884. *m.* Dr. Miss Nagubai Joshi, *d* of Sir Moropant Joshi of Nagpur. *Educ.:* Victoria College. *Address:* Gwalior.

RAMAIYA, A., M.A., Fellow of the Royal Economic Society (London), Vakil, Madura; Adviser, Madura-Ramnad Chamber of Commerce. *b.* 1894. *Educ.* Madras Christian College, Gave evidence before the Indian Taxation Inquiry Committee (1924-25) and the Currency Commission (1925-26); Secretary, Mudura District People's Association 1925 to 1927. *Publicatons:* "A National System of Taxation"; "Monetary Reform in India." *Address:* Lakshmi Vilasam, North Veli Street, Madura, S. India.

RAMADAS PANTULU, THE HON. V., B.A., B.L., High Court Vakil, Madras, *b.* Oct. 1873 *Educ:* Madras Christian College. Member, Council of State since 1925, Leader of the Swarajist Party in the Council of State since 1926; President, Madras Central Urban Bank Ltd. (Provincial Co-operative Bank for Madras); President, Madras Provincial Co-operative Institute; Member of Senate and Academic Council of Madras University; Chairmn, Telegu Board of Studies and Membera, Board of Studies and Faculty of Law. *Publications:* Commentaries on the Madras Estate Land Act (Land Tenures). *Address:* Farhatbagh, Mylapore, Madras.

RAMAN, CHANDRASEKHARA VENKATA, M.A., Hon. D.Sc.(1921),F.R.S. (1924); Palit Professor of Physics, Calcutta University. *b.* 7th November 1888. *m.* Lokasundarammal. *Educ:* A. V. N. College, Vizagapatam and Presidency College, Madras. Enrolled Officer, Indian Finance Dept. 1907; Palit Prof., Calcutta Univ. 1917; Hon. Secry., Indian Association for the Cultivation of Science, 1919; Hon. Prof., Hindu Univ., Benares, 1917; British Association Lecturer (Toronto), 1924; Research Associate, California Institute of Technology, 1924; President, Indian Science Congress, 1928. Fellow of the Institute of Physics, Asiatic Society of Bengal. *Publications:* Experimental Investigations on Vibrations; Theory of Bowed Instruments; Molecular Diffraction of Light; Music-Instruments; X-ray Studies; and numerous scientific papers in the Indian Journal of Physics which is conducted by him and in British and American journals. *Address:* 210, Bow Bazar Street, Calcutta.

RAMA RAYANNINGAR, SRI P., RAJA SIR, RAJA OF PANAGAL, M.A., K.C.I.E. *b.* 1866. *Educ.:* Triplicane Hindu High School; Presidency College; was nominated Fellow of the Madras University. Represented Zemindars of this Presidency in Imperial Legis. Council from 1912-1915; was invited to Imperial War Conference in 1918; again returned to Imperial Legislative Council in 1919; gave evidence before Joint Committees of Parliament on behalf of All-India Zemindars; pleaded also the cause of non-Brahmins of Madras. Elected leader of the non-Brahmin Party; President, South Indian Liberal Federation; presided over the All-India non-Brahmin Congress, Amraoti, 1925; Chief Minister to Government in charge of Local Self-Government, Madras, 1921-26. *Address:* Tawker's Gardens, Royapettah, Madras.

RAMASWAMI AIYAR, SIR CHETPAT P., K.C.I.E. (1925); B.A., B.L., C.I.E. (1923); Law Member, Madras Executive Council. *b.* 12 Nov. 1879. *m.* Sitalakshmi, *d.* of C. V. Sundram Shastri and sister of Justice Kumaraswami Sastri. *Educ.:* Wesley College, Presidency College and Law College, Madras. English and Sanskrit University Prizeman. Enrolled as Vakil, 1903 and as Advocate, 1923. For many years member of the Madras Corporation and Standing Committee. Fellow and Syndic of Madras University; Trustee of various educational institutions. Secretary to Congress, 1917-18; connected with the National Congress until 1918. Gave evidence before Joint Parliamentary Committee on Reforms, 1919, also before Meston and Southborrough Committees. Member of Committee to draft Regulations for Madras under the Reform Act. Represented Madras Presidency at War Conference, Delhi. Returned to Legislative Council by University of Madras, 1918, and by City of Madras, 1920. Advocate-General, 1920-1923. Member, Executive Council, 1923. Delivered the Convocation Address, University of Madras, 1924; Senior Member and Vice-President, Executive Council, April 1925. Represented India at the League of Nations Assembly at Geneva as a substitute delegate in 1926 and as delegate in 1927. Resumed practice at the Bar, March 1928. *Publications:* Various pamphlets and articles on Financial and Literary topics. *Address:* The Grove Cathedral, Madras; and DeLisle, Ootacamund.

RAMCHANDRA RAO, DEWAN BAHADUR M., B.A., B.L., Kaisar-i-Hind Gold Medal, Vakil High Court; Member, Legislative Assembly, 1924-1926. *b.* September 1868. *m.* M. Viyyamma, *Educ.*, at Presidency College, Madras. Member, Madras Legislative Council, 1929-1923; Member of the deputation of the All-India Moderates in 1919 and Member of the Lytton Committee on Indian Students; Member, Indian Sandhurst Committee. President, Prohibition Legue 1926; President, All-India States Subjects Confce., 1927. *Publications:* Development of Indian Polity. *Address:* Ellore, Madras Presidency.

RAMESAM, THE HON. MR. JUSTICE VEPA, B.A., B.L., Judge, High Court, Madras. *b.* 27 July 1875. *m.* Lakshminarasamma. *Educ.:* Hindu Coll., Vizagapatam; Presidency Coll., Madras, and Law Coll., Madras. Practised as High Court Vakil at Vizagapatam from 1896 to 1900; at Madras 1900-1920; Govt. Pleader 1916-20; appointed Judge, 1920. *Address:* Gopal Vihar, Mylapore, Madras.

RAMPAL, RAJA: *see* KUTLEHR.

RAMPUR, MAJOR-GENERAL H. H. ALIJAH FAMZAND-I-DILPIZR-I-DAULAT-I-INGLISHIA MUKHLISUD-DAULAH, NASIR-UL-MULK, AMIR-UL-UMARA, NAWAB SIR SAYED MOHAMMAD HAMID ALI KHAN BAHADUR, MUSTAID JUNG; G.C.S.I. (1921), G.C.I.E., G.C.V.O.; A.D.C. to King-Emperor. *b.* 31 Aug. 1875. *S.* 1889. State has area of 892 sq. miles and population of 531,712. Salute of 15 guns. *Address:* Rampur State, U. P.

RANGACHARIAR, DEWAN BAHADUR TIRUVENKATA, B.A., B.L., C.I.E. (1925), M.L.A. since 1920. Vakil, High Court, Madras. *b.* 1865. *m.* Ponnammal, *d.* of S. Rajagopala Aiyengar of Srirangam *Educ.:* S. P. G. College, Trichinopoly; Law College, Madras. Schoolmaster for 3 years; enrolled as Vakil, High Court, Madras, 1891; Professor, Law Coll., 1898-1900; Member, Madras Corpn., since 1908; Member, Madras Legis. Council, 1916-1919; Member, Indian Bar Committee; Mercantile Marine Committee; Esher Committee, Elected Dy. President, Leg. Assembly; Member, Indian Colonies Committee on deputation at London with the Colonial Office President, Telegraph Committee, 1921, Member, Frontier Committee; Chairman, Madras Publicity Board. Represented India at the opening by H. R. H. the Duke of York of the Federal Parliament at Canberra, Australia, 1927; Chairman, Indian Cinemetograph Committee, 1928. *Publications:* A book on Village Panchayats. *Address:* Ritherdon House, Vepery, Madras.

RANGANATHAM, ARCOT, B.A., B.L., Minister for Development, Madras. *b.* 29 June 1879. *Educ:* Christian and Law Colleges, Madras. Entered Government Service in 1901; resigned Deputy Collectorship in 1915; entered Legislative Council in 1920 for Bellary District, re-elected in 1923 and 1926. Went to England as a member of the National Convention Deputation in 1924. Minister for Development, Madras, December 1926 to March 1928; Hon. Secretary, Young Men's Indian Association, Madras, from 1916; Hon. Organising Secretary and Treasurer, Reconstruction League 1928. *Publications:* Editor, "Prajabandhu," a Telegu Magazine devoted to the education of the Electorate; Author of "Indian Village—as it is." *Address:* Shant-Kunj, Adyar, Madras, S.

RANGASWAMI IYENGAR, A., B.A. (1897), B.L. (1901), Editor, *The Hindu*, Madras. *b.* 1877. *Educ:* Coimbatore High School and the Presidency Coll., Madras. Clerk in the Chief Secretariat; practised as a pleader in Tanjore, joined *The Hindu*, then bought and took up the editorship of *The Swadesamitram*, and from Jan. 1928 is Editor of *The Hindu*. Elected to the second and third Legis. Assembly. Secretary All India Swaraj Party 1925-27. General Secretary of the Congress 1926-27, *Publications.:* The Indian Constitution. *Address:* 45, Mowbray's Road, Mylapore, Madras.

RANGASWAMY AYYANGAR, K. V., Landholder and Member of the Council of State from 1920-25. *b.* 1886. Member of the old Imperial Legislative Council from 1916-1920, elected by the Zamindars of Madras Presidency, elected representative of the Legislative Assembly from 1926 again by the Madras Landlords, and a Congressman of the Nationalist Party. Connected with the founding and management of National College, Trichinopoly; President of the Chittur Conference; Chairman of the Madras Prov. Confce. and Trichinopoly Dist. Confce. and President, Madras Provincial Conference, 1926. *Address:* Vasudeva Vilas, Srirangam, Madras Presidency.

RANGOON, BISHOP OF, since 1910; RT. REV. ROLLESTONE STERRITT FYFFE, D.D. *m.* 1914, Annis Kathleen, *d.* of late Herbert Hardy of Danehurst, Sussex, three *s.* *Educ:* Clifton Coll., Emmanuel Coll., Cam. Ordained 1894. Curate of Bishopwearmouth, Sunderland, 1894-98; Curate of S. Agnes, Bristol; in Charge of Clifton College Mission, 1898-1900; Vicar of St. Agnes, Bristol, 1900-1904. S.P.G. Missionary, Mandalay, 1904-10. *Address:* Bishopscourt, Rangoon.

RANJITSINHJI; *see* Nawanagar.

RANKIN, THE HON. CHIEF JUSTICE SIR GEORGE CLAUS, Kt. (1925), High Court, Calcutta. *b.* 12th August 1877. *m.* Alice Maud Amy Sayer. *Educ.:* Trinity College, Cambridge. Barrister (Lincoln's Inn) 1904. Northern Circuit. R. Garrison Artillery. 1916-18. *Address:* 9, Camac Street, Calcutta.

RAO, RAO SAHIB S. M. RAJA RAM, Editor, *The Wednesday Review*. *b.* 24th December 1876. *Educ.:* S. P. G. and St. Joseph's College, Trichinopoly. Started *The Wednesday Review* in 1905 and *The Zamindar and Progress* (monthly) incorporated into the *Feudatory and Zemindari India* in 1919. *Publication:* Life of Sir Subramania Aiyar, K.C.I..E., for sometime Ag. Chief Justice of Madras. *Address:* Trichinopoly and 16, Harrington Road, Chetpet, Madras.

RAO, VINAYEK GANPAT, B.A. (Bom.), 1908; B.A., LL.B. (Cantab), 1913; called to the Bar, 1914. Professor of French at the Elphinstone College, Bombay. *b.* 24 September 1888. *m.* Miss B. R. Kothare, *d.* of Mr. R. N. Kothare, Solicitor. *Educ.:* Elphinstone Middle School; Elphinstone High School; Elphinstone College; St. John's College, Cambridge; Grenoble University (France). Hon. Professor of French at the Elphinstone College, 1914-1917. Hon. Professor of French at the Wilson College, 1914-1917, 1921-1923. Officer d'Academie. Prof. of Law at the Government Law College, Bombay, 1923-1924 (June); Asstt. Law Reporter, India Law Reports, Bombay Series for some time; joined the Educational Service; Prof. of French at the Elphinstone College from June 1924. Justice of Peace 1927; Coopted Member of the School Committee, Bombay Municipality; Asstt. District Commissioner, Municipal Boy Scouts Association, Second Lt. in the University Training Corps. *Address:* 347, Kalbadevi Road, Bombay (2).

RATLAM, COL. H. H. SIR SAJJAN SINGHJI, K.C.S.I., K.C.V.O., A.D.C. to H.R.H. The Prince of Wales, Maharaja Sahib Bahadur of Rutlam. *b.* 13th Jan. 1880. *S.* father (Sir Ranjit Singhji, K.C.I.E.), 1893; *m.* 1902, *d.* of H.H. Rao of Kutch; descended from younger branch of Jodhpur family, and maintained moral supremacy over Rajput Chiefs in Malwa; served European War (France) from April 1915 to May 1918, mentioned in despatches; presented with Croix d'officier of the legion d'Honneur. Served Afghan War, 1919; Member of Managing Committee, Mayo College, Ajmer; Mem., Managing Committee, Daly College, Indore; Vice-President, Central India Rajputra Hita Karini Sabha. Salute 15 guns. *Address:* Ranjit Bilas Palace, Rutlam.

Council of Regency; ranks as First Class Sardar in the Bombay Presidency. *b.* Jan. 1884. *m.* Dr. Miss Nagubai Joshi, *d* of Sir Moropant Joshi of Nagpur. *Educ.:* Victoria College. *Address:* Gwalior.

RAMAIYA, A., M.A., Fellow of the Royal Economic Society (London), Vakil, Madura; Adviser, Madura-Ramnad Chamber of Commerce. *b.* 1894. *Educ.* Madras Christian College, Gave evidence before the Indian Taxation Inquiry Committee (1924-25) and the Currency Commission (1925-26); Secretary, Mudura District People's Association 1925 to 1927. *Publicatons:* "A National System of Taxation"; "Monetary Reform in India." *Address:* Lakshmi Vilasam, North Veli Street, Madura, S. India.

RAMADAS PANTULU, THE HON. V., B.A., B.L., High Court Vakil, Madras, *b.* Oct. 1873 *Educ:* Madras Christian College. Member, Council of State since 1925, Leader of the Swarajist Party in the Council of State since 1926; President, Madras Central Urban Bank Ltd. (Provincial Co-operative Bank for Madras); President, Madras Provincial Co-operative Institute; Member of Senate and Academic Council of Madras University; Chairmn, Telegu Board of Studies and Membera, Board of Studies and Faculty of Law. *Publications:* Commentaries on the Madras Estate Land Act (Land Tenures). *Address:* Farhatbagh, Mylapore, Madras.

RAMAN, CHANDRASEKHARA VENKATA, M.A., Hon. D.Sc.(1921), F.R.S. (1924); Palit Professor of Physics, Calcutta University. *b.* 7th November 1888. *m.* Lokasundarammal. *Educ:* A. V. N. College, Vizagapatam and Presidency College, Madras. Enrolled Officer, Indian Finance Dept. 1907; Palit Prof., Calcutta Univ. 1917; Hon. Secry., Indian Association for the Cultivation of Science, 1919; Hon. Prof., Hindu Univ., Benares, 1917; British Association Lecturer (Toronto), 1924; Research Associate, California Institute of Technology, 1924; President, Indian Science Congress, 1928. Fellow of the Institute of Physics, Asiatic Society of Bengal. *Publications:* Experimental Investigations on Vibrations; Theory of Bowed Instruments; Molecular Diffraction of Light; Music-Instruments; X-ray Studies; and numerous scientific papers in the Indian Journal of Physics which is conducted by him and in British and American journals. *Address:* 210, Bow Bazar Street, Calcutta.

RAMA RAYANNINGAR, SRI P., RAJA SIR, RAJA OF PANAGAL, M.A., K.C.I.E. *b.* 1866. *Educ.:* Triplicane Hindu High School; Presidency College; was nominated Fellow of the Madras University. Represented Zemindars of this Presidency in Imperial Legis. Council from 1912-1915; was invited to Imperial War Conference in 1918; again returned to Imperial Legislative Council in 1919; gave evidence before Joint Committees of Parliament on behalf of All-India Zemindars; pleaded also the cause of non-Brahmins of Madras. Elected leader of the non-Brahmin Party; President, South Indian Liberal Federation; presided over the All-India non-Brahmin Congress, Amraoti, 1925; Chief Minister to Government in charge of Local Self-Government, Madras, 1921-26. *Address:* Tawker's Gardens, Royapettah, Madras.

RAMASWAMI AIYAR, SIR CHETPAT P., K.C.I.E. (1925); B.A., B.L., C.I.E. (1923); Law Member, Madras Executive Council. *b.* 12 Nov. 1879. *m.* Sitalakshmi, *d.* of C. V. Sundram Shastri and sister of Justice Kumaraswami Sastri. *Educ.:* Wesley College, Presidency College and Law College, Madras. English and Sanskrit University Prizeman. Enrolled as Vakil, 1903 and as Advocate, 1923. For many years member of the Madras Corporation and Standing Committee. Fellow and Syndic of Madras University; Trustee of various educational institutions. Secretary to Congress, 1917-18; connected with the National Congress until 1918. Gave evidence before Joint Parliamentary Committee on Reforms, 1919, also before Meston and Southborrough Committees. Member of Committee to draft Regulations for Madras under the Reform Act. Represented Madras Presidency at War Conference, Delhi. Returned to Legislative Council by University of Madras, 1918, and by City of Madras, 1920. Advocate-General, 1920-1923. Member, Executive Council, 1923. Delivered the Convocation Address, University of Madras, 1924; Senior Member and Vice-President, Executive Council, April 1925. Represented India at the League of Nations Assembly at Geneva as a substitute delegate in 1926 and as delegate in 1927. Resumed practice at the Bar, March 1928. *Publications:* Various pamphlets and articles on Financial and Literary topics. *Address:* The Grove Cathedral, Madras; and DeLisle, Ootacamund.

RAMCHANDRA RAO, DEWAN BAHADUR M., B.A., B.L., Kaisar-i-Hind Gold Medal, Vakil High Court; Member, Legislative Assembly, 1924-1926. *b.* September 1868. *m.* M. Viyyamma, *Educ.*, at Presidency College, Madras. Member, Madras Legislative Council, 1929-1923; Member of the deputation of the All-India Moderates in 1919 and Member of the Lytton Committee on Indian Students; Member, Indian Sandhurst Committee. President, Prohibition Legue 1926; President, All-India States Subjects Confce., 1927. *Publications:* Development of Indian Polity. *Address:* Ellore, Madras Presidency.

RAMESAM, THE HON. MR. JUSTICE VEPA, B.A., B.L., Judge, High Court, Madras. *b.* 27 July 1875. *m.* Lakshminarasamma. *Educ.:* Hindu Coll., Vizagapatam; Presidency Coll., Madras, and Law Coll., Madras. Practised as High Court Vakil at Vizagapatam from 1896 to 1900; at Madras 1900-1920; Govt. Pleader 1916-20; appointed Judge, 1920. *Address:* Gopal Vihar, Mylapore, Madras.

RAMPAL, RAJA; *see* KUTLEHR.

RAMPUR, MAJOR-GENERAL H. H. ALIJAH FAMZAND-I-DILPIZR-I-DAULAT-I-INGLISHIA MUKHLISUD-DAULAH, NASIR-UL-MULK, AMIR-UL-UMARA, NAWAB SIR SAYED MOHAMMAD HAMID ALI KHAN BAHADUR, MUSTAID JUNG; G.C.S.I. (1921), G.C.I.E., G.C.V.O.; A.D.C. to King-Emperor. *b.* 31 Aug. 1875. *S.* 1889. State has area of 892 sq. miles and population of 531,712. Salute of 15 guns. *Address,* Rampur State, U. P.

RANGACHARIAR, DEWAN BAHADUR TIRUVENKATA, B.A., B.L., C.I.E. (1925), M.L.A. since 1920. Vakil, High Court, Madras. *b.* 1865. *m.* Ponnammal, *d.* of S. Rajagopala Aiyengar of Srirangam *Educ.:* S. P. G. College, Trichinopoly; Law College, Madras. Schoolmaster for 3 years; enrolled as Vakil, High Court, Madras, 1891; Professor, Law Coll., 1898-1900; Member, Madras Corpn., since 1908; Member, Madras Legis. Council, 1916-1919; Member, Indian Bar Committee; Mercantile Marine Committee; Esher Committee, Elected Dy. President, Leg. Assembly; Member, Indian Colonies Committee on deputation at London with the Colonial Office President, Telegraph Committee, 1921, Member, Frontier Committee; Chairman, Madras Publicity Board. Represented India at the opening by H. R. H. the Duke of York of the Federal Parliament at Canberra, Australia, 1927; Chairman, Indian Cinemetograph Committee, 1928. *Publications:* A book on Village Panchayats. *Address:* Ritherdon House, Vepery, Madras.

RANGANATHAM, ARCOT, B.A., B.L., Minister for Development, Madras. *b.* 29 June 1879. *Educ:* Christian and Law Colleges, Madras. Entered Government Service in 1901; resigned Deputy Collectorship in 1915; entered Legislative Council in 1920 for Bellary District, re-elected in 1923 and 1926. Went to England as a member of the National Convention Deputation in 1924. Minister for Development, Madras, December 1926 to March 1928; Hon. Secretary, Young Men's Indian Association, Madras, from 1916; Hon. Organising Secretary and Treasurer, Reconstruction League 1928. *Publications:* Editor, "Prajabandhu," a Telegu Magazine devoted to the education of the Electorate; Author of "Indian Village—as it is." *Address:* Shant-Kunj, Adyar, Madras, S.

RANGASWAMI IYENGAR, A., B.A. (1897); B.L. (1901), Editor, *The Hindu*, Madras. *b.* 1877. *Educ:* Coimbatore High School and the Presidency Coll., Madras. Clerk in the Chief Secretariat; practised as a pleader in Tanjore, joined *The Hindu*, then bought and took up the editorship of *The Swadesamitram*, and from Jan. 1928 is Editor of *The Hindu*. Elected to the second and third Legis. Assembly. Secretary All India Swaraj Party 1925-37. General Secretary of the Congress 1926-27, *Publications.:* The Indian Constitution. *Address;* 45, Mowbray's Road, Mylapore, Madras.

RANGASWAMY AYYANGAR, K. V., Landholder and Member of the Council of State from 1920-25. *b.* 1886. Member of the old Imperial Legislative Council from 1916-1920, elected by the Zamindars of Madras Presidency, elected representative of the Legislative Assembly from 1926 again by the Madras Landlords, and a Congressman of the Nationalist Party. Connected with the founding and management of National College, Trichinopoly; President of the Chittur Conference; Chairman of the Madras Prov. Confce. and Trichinopoly Dist. Confce. and President, Madras Provincial Conference, 1926. *Address:* Vasudeva Vilas, Srirangam, Madras Presidency.

RANGOON, BISHOP OF, since 1910; RT. REV. ROLLESTONE STERRITT FYFFE, D.D. *m.* 1914, Annis Kathleen, *d.* of late Herbert Hardy of Danehurst, Sussex, three *s.* *Educ:* Clifton Coll., Emmanuel Coll., Cam. Ordained 1894. Curate of Bishopwearmouth, Sunderland, 1894-98; Curate of S. Agnes, Bristol; in Charge of Clifton College Mission, 1898-1900; Vicar of St. Agnes, Bristol, 1900-1904. S.P.G. Missionary, Mandalay, 1904-10. *Address:* Bishopscourt, Rangoon.

RANJITSINHJI; *see* Nawanagar.

RANKIN, THE HON. CHIEF JUSTICE SIR GEORGE CLAUS, Kt. (1925), High Court, Calcutta. *b.* 12th August 1877. *m.* Alice Maud Amy Sayer. *Educ.:* Trinity College, Cambridge. Barrister (Lincoln's Inn) 1904. Northern Circuit. R. Garrison Artillery, 1916-18. *Address:* 9, Camac Street, Calcutta.

RAO, RAO SAHIB S. M. RAJA RAM, Editor, *The Wednesday Review*. *b.* 24th December 1876. *Educ.:* S. P. G. and St. Joseph's College, Trichinopoly. Started *The Wednesday Review* in 1905 and *The Zamindar and Progress* (monthly) incorporated into the *Feudatory and Zemindari India* in 1919. *Publication:* Life of Sir Subramania Aiyar, K.C.I..E., for sometime Ag. Chief Justice of Madras. *Address:* Trichinopoly and 16, Harrington Road, Chetpet, Madras.

RAO, VINAYEK GANPAT, B.A. (Bom.), 1908; B.A., LL.B. (Cantab), 1913; called to the Bar, 1914. Professor of French at the Elphinstone College, Bombay. *b.* 24 September 1888. *m.* Miss B. R. Kothare, *d.* of Mr. R. N. Kothare, Solicitor. *Educ.:* Elphinstone Middle School; Elphinstone High School; Elphinstone College; St. John's College, Cambridge; Grenoble University (France). Hon. Professor of French at the Elphinstone College, 1914-1917. Hon. Professor of French at the Wilson College, 1914-1917, 1921-1923. Officer d'Academie. Prof. of Law at the Government Law College, Bombay, 1923-1924 (June); Asstt. Law Reporter, India Law Reports, Bombay Series for some time; joined the Educational Service; Prof. of French at the Elphinstone College from June 1924. Justice of Peace 1927; Coopted Member of the School Committee, Bombay Municipality; Asstt. District Commissioner, Municipal Boy Scouts Association, Second Lt. in the University Training Corps. *Address:* 347, Kalbadevi Road, Bombay (2).

RATLAM, COL. H. H. SIR SAJJAN SINGHJI, K.C.S.I., K.C.V.O., A.D.C. to H.R.H. The Prince of Wales, Maharaja Sahib Bahadur of Rutlam. *b.* 13th Jan. 1880. *S.* father (Sir Ranjit Singhji, K.C.I.E.), 1893; *m.* 1902, *d.* of H.H. Rao of Kutch; descended from younger branch of Jodhpur family, and maintained moral supremacy over Rajput Chiefs in Malwa; served European War (France) from April 1915 to May 1918, mentioned in despatches; presented with Croix d'officier of the legion d'Honneur. Served Afghan War, 1919; Member of Managing Committee, Mayo College, Ajmer; Mem., Managing Committee, Daly College, Indore; Vice-President, Central India Rajputra Hita Karini Sabha. Salute 15 guns. *Address:* Ranjit Bilas Palace, Rutlam.

RAWLINSON, HUGH GEORGE, Principal Deccan College, Poona; Fellow, Bombay University. *b.* 12th May 1880; *m.* 1910 to Rose, only *d.* of Lt.-Col. J. F. Fitzpatrick. I.M.S. *Educ.:* Market Bosworth Grammar Sch. and Emmanuel Coll., Cambridge; (Exhibitioner and Scholar; B.A., 1st Class; Classical Tripos, 1902; M.A., 1908); Lecturer in English and Classics, Royal College, Colombo, 1903-08; Hare University Prize, 1908. Entered I.E.S. as Professor of English Literature, Deccan Coll., Poona, 1908; Ag. Principal, Gujarat Coll., Ahmedabad, 1914; *ditto*, Deccan College, 1915; Fellow of the Royal Historical Society, 1916; Principal, Karnatak Col., Dharwar, 1917-23. *Publications:* Bactria, the History of a Forgotten Empire; Indian Historical Studies; Shivaji, the Maratha: Intercourse between India and the West; The Beginnings of British India, an Account of the Old English Factory at Surat: New Edition of Forbes' Ras Mala. Contributor to Vol. II, Cambridge History of India. *Address:* Deccan College, Poona.

RAY, PRITHWIS CHANDRA, Editor of *The Indian World* (Calcutta). *b.* 1870. *m.* 1888, *Educ.:* Mymensingh Zilla School and Presidency College, Calcutta. Founder of the National Liberal League (the first Indian liberal organisation), Calcutta; Secretary, 21st and 26th Sessions of the Indian National Congress, held in Calcutta in 1906 and 1911; Secretary, Bengal Social Reform Association from 1908 to 1914; Member of the Liberal Deputation to England, 1919, and the Bengal Landholders' Delegate to England in 1920, Donor of a library (in the name of the late Mr. Gokhale) to the Indian Association of Calcutta (1919), Editor-in-Chief of the *Bengalee* from January 1921 to June 1924; joined the Swaraj Party in April 1925. *Publications.*:" Poverty Problem in India," "Indian Famines," "Our Demand for Self-Government," "A Scheme of Indian Constitutional Reforms." "A Catechism on Indian Politics" and the "Life and Times of C. R. Das" (Published by the Oxford University Press). Member, National Liberal Club, London, S. W. *Address:* 5, Rifle Road, Ballygunge, Calcutta.

RAY, SIR PROFULLA CHANDRA, KT., C.I.E., D.Sc. (Edin.), Ph. D. (Cal.), Patit Prof. of Chemistry, Univ. Coll. of Sc., Calcutta. *b.* Bengal, 1861. *Educ.:* Calcutta; Edinburgh Univ. Graduated at Edinburgh, D.Sc.; Hon. Ph.D., Calcutta Univ., 1908; Hon. D.Sc., Durham Univ., 1912. President, National Council of Education, Indian Chemical Society; Founder and Director, Bengal Chemical and Pharmaceutical Works, Ltd. *Address:* College of Science, Calcutta.

READYMONEY, SIR JEHANGIR COWASJEE JEHANGIR; *see* JEHANGIR.

REED, SIR STANLEY, KT., K.B.E., LL.D. (Glasgow), Editor, *The Times of India*, Bombay, 1907-1923. *b.* Bristol, 1872. *m.* 1901, Lilian, *d.* of John Humphrey of Bombay. Joined staff, *Times of India*, 1897; Sp. Correspdt., *Times of India* and *Daily Chronicle* through famine districts of India, 1900; tour of Prince and Princess of Wales in India, 1905-06; Amir's visit to India, 1907, and Persian Gulf, 1907; Jt. Hon. Sec., Bombay Pres., King Edward and Lord Hardinge Memorials; *Ex.* Lt.-Col. Commdg Bombay L. H. Represented Western India at Imp. Press Confce., 1909. *Address:* *The Times of India*, 187, Fleet Street, London, E.C.

REID, COLONEL CARTWRIGHT, C.B. (June 1917), M. Inst. C.E., Engineer in Chief, Vizagapatam Harbour. *b.* 7 Nov., 1864. *m.* Julia, only *d.* of late Henry Miller. *Educ.:* Kirkby Lonsdale Grammar School. Articled to Thomas Reid, C. E. Wakefield and Normanton. Entered Admiralty Service (1888) as Asstt. Civil Engineer; served at Pembroke, Halifax, Esquimalt and Chatham; was Superintending Civil Engineer, Malta, Chatkam and Rosyth and Deputy Civil Engineer-in-Chief Admiralty Lt.-Col. Royal Marines for reconstruction of Belgian Ports; Acted as a Consultant to Calcutta Port Trust in connection with proposed King George's Dock Scheme and Basra Port re. Shatt-el-Arab. Loaned by Admiralty (1921) for construction of Vizagapatam Harbour. *Address:* Vizagapatam Harbour, Vizagapatam.

REILLY, HENRY D'ARCY CORNELIUS, Judge of the Madras High Court. *b.* 15th January 1876. *m.* to Margaret Florence Wilkinson (1903) *Educ:* Merchant Taylors' School and Corpus Christi College, Oxford. Indian Civil Service (Madras), arrived November 1899; Registrar of the High Court, 1910-1913; District and Sessions Judge 1916. *Address:* The Albany, College Road, Madras, S.W.

REYNOLDS, LEONARD WILLIAM, B.A. (Oxon.), C. S. I. (1928) C.I.E. (1911); M. C. (1916). President of Council of Regency, Jaipur State. *b.* 26 Feb. 1874 *m.* Blanche Mortlock Lias, 1919. *Educ*; Bradfield Coll., Exeter Coll., Oxford. I.C.S. 1898, Asstt. Collector, Allahabad, Div., U.P. 1902; Asstt. to the A.G.G. in Central India 1902-07; Asstt. Secretary, Foreign Department, Government of India, 1908; Dy. Secretary, Government of India, Foreign Department, 1911; Commissioner, Ajmer Merwara, 1916; Resident, Western States of Rajputana, 1918; President, Council of Regency, Jaipur State, Rajputana, 1924-27; Agent to the Governor-General, Rajputana, Chief Commissioner, Ajmer-Merwara, 1927. *Address:* The Residency, Mount Abu.

RICE, STANLEY, Private Secretary to H. H. the Maharaja Gaekwar of Baroda. *b.* 1869. *m.* Veronica Crossman. *Educ:* Winchester and New College, Oxford, I.C.S. (Madras) 1890; retired 1918. *Publications:* The Challenge of Asia (Murray); Tales from the Mahabharata in English verse (Selwyn and Blount); numerous articles in the Nineteenth Century, Fortnightly, Quarterly, Criterion, Asiatic Times, etc. *Address:* Baroda.

RIEU, THE HON. MR. JEAN LOUIS, I.C.S., C.S.I. (1920). Member of Council, Bombay *b.* 23 Nov. 1872. *m.* to Ida Augusta Edwards (deceased). *Educ.:* University Coll. School, London and Balliol Coll., Oxford. Entered I.C.S. in 1893; served as Asstt. Collr. and Collr. in the Bombay Presidency till 1911,

when appointed Secy. to Government, General Department; Collr. of Karachi, 1917; Secretary to Govt., Revenue and Financial Departments, 1918; Commissioner in Sind, 1919-1925. *Address:* The Secretariat, Bombay.

RIVETT-CARNAC, HERBERT GORDON, British Trade Agent, Gyantse, Tibet. *b.* 1892, 3rd son of John Thurlow Rivett-Carnac, retired D. I. G. of Police. *m.* June 1925, Cushla, *er. d.* of Lt., Colonel R. S. Pottinger. *Educ.:* Bradfield Col. (Berks.) and R. M. C. Entered Army, 1911. Served during War on General Staff in Mesopotamia and as Asst. Political Officer, Amara; is Major, Indian Army, and British Trade Agent, Tibet. *Address:* Gyantse and Yatung, Chumbi Valley.

RIVETT-CARNAC, JOHN THURLOW retired Dy. Inspr.-General of Police, Eastern Bengal and Assam, 2nd *s.* of late Charles Forbes Rivett-Carnac, Bengal Civil Service, and *gr. s.* of Sir James Rivett-Carnac, Bart., Governor of Bombay, 1838-41. *b.* 1856. *m.* 1887, Edith Emily, *d.* of late H. H. Brownlow and has four sons and one daughter. Entered Indian Police, 1877, retired 1911, served in Burma campaign 1886-7 (medal), and in Chin Lushai expedition, 1889 90 (clasp). *Address:* Shillong, Assam.

RIVINGTON, REV. CECIL STANSFELD; Kaisar-i-Hind Gold Medal (1918); Mission Priest in Diocese of Bombay; Hon. Canon of St. Thomas' Cathedral, Bombay. *b.* London. 1853. *Educ.*: Rugby; Solicitors Examination, London; Cuddesdon College Priest, 1878. *Publications*: Commentaries on the Psalms, St. Luke and St. John, a Manual of Theology, Meditations on the Gospel of S. Mark (all in Marathi). *Address:* Betgeri-Gadag, Dharwar District, Bombay.

ROBINSON, SIR SYDNEY MADDOCK, KT., Chief Justice, High Court, Burma (1922). *b.* 3 Dec. 1865. *Educ.:* Hereford Cath. Sch.; Brasenose Coll., Oxford; Called to Bar., Middle Temple, 1888; Govt. Adv. and Leg. Rem. to Punjab Govt., Puisne Judge, Ch. Court of L. Burma, 1908-1920; Chief Judge, 1920-1922. *Address:* 1, Leeds Road, Rangoon.

ROGERS, PHILIP GRAHAM, B. A. (Oxon)., C.I.E. (1924), I.C.S., Offg. Director-General 1928. *b.* April 3, 1877. *m.* Eiren Scott O'Connor. *Educ:* Christ's Hospital Keble College, Oxford. Joined Bengal Civil Service, December 1901 and served as Assistant, Joint and District Magistrate and Collector. Personal Assistant to Ch. Commissioner of Assam, 1904; Private Secretary to Lieut.-Governorof Eastern Bengal and Assam, 1905; joined Post Office, 1909: Postmaster-General, Bombay, 1922-27. Dy. Director-General. 1927. *Address*: Simla,

ROUSE, ALEXANDER MACDONALD, C.I.E. F.C.H., Chief Engineer, Delhi. *b.* 14 Sep. 1878. *m.* Jean Lois Jameson, March 1912; two *s.* *Educ.:* St. Paul's Sch.; R.I.E.C. Cooper's Hill. *Address:* Delhi.

ROW, DEWAN BAHADUR CONJEEVERAM KRISHNA-SWAMI, Vakil, High Court, Madras. *b.* Aug. 12, 1867. *Educ.:* Presy. Coll., Madras. *m.* a *gr. d.* of the late Raja Sir T. Madhava Row, K.C.S.I., Vakil, Madras High Court, 1889. Joined Provincial Judicial Service, 1894; Rao Bahadur in 1911; gave evidence before the Public Services Commission, 1913; M.L.A. (nominated); acted as Judge, High Court, Madras, 1921; retired as District Judge in 1922, rejoined the Bar; made Dewan Bahadur, 1922; appeared in the High Court at Madras in 1923 in the Succession Case relating to the Tanjore Palace Estate for the Senior Prince of Tanjore. *Address:* Masthu Baug, St. George's Cathedral Road, Madras.

ROW, DIWAN BAHADUR RAGHUNATHA ROW RAMACHANDRA, C.S.I., *b.* 27 September 1871. *Educ.:* Trivandrum and Presidency College, Madras. Statutory Civil Service, 1890-92, transferred to Provincial Service; Collector; Registrar, Co-op. Credit Societies; Secretary to Govt. of Madras. Collector of Madras. *Address:* Madras.

ROY, RT. REV. AUGUSTIN, Bishop of Coimbatore since 1904. *b.* France, 1863. *Address*: Catholic Cathedral, Coimbatore.

ROY, SIR GANENDRA PROSAD, KT. (1926), Member of the Institute of Electrical Engineers; *b.* 6 Feb. 1872 *m.* Mertha, Goodeve Chuckerbutty. *Educ:* Cooper's Hill. Appointed Assistant Superintendent of Telegraphs on 1st Oct. 1894; Superintendent of Telegraphs on 4th Nov. 1907; Director of Telegraphs on 1st Oct. 1916 and Postmaster-General, Bengal and Assam, on 1st Feb. 1920; was Postmaster-General, Burma, from 14th Dec. 1921 to 13th April 1922; Postmaster-General, Bengal and Assam from 1st December 1922 to 25th April 1923; Dy. Chief Engineer, Telegraphs, from 24th Dec. 1923 to 29th Feb. 1924; Ch. Engineer, Telegraphs, from 1st March 1924 to 7th Aug. 1925; Director-General of Posts and Telegraphs, 1925-27. *Address*: Simla.

ROY, SURENDRA NATH, SASTRA VACHASPATI, B.A., B.L. (Calcutta Univ.); Vakil, High Court, Calcutta, and Landholder. *b.* April 1862. *Educ.:* St. Xavier's College; Hindu School and Presidency College, Calcutta. Enrolled as Vakil of the High Court, 1883; enrolled Advocate, 1924; elected Vice-Chairman of the Garden Reach Municipality (first Mill Municipality in Bengal) in 1897; has been elected Chairman, South Suburban Municipality since 1900; Commissioner, Calcutta Corporation from 1895-1900; Member, Dist. Board of 24 Pergunnas from 1916-1922; elected Member, Bengal Legis. Council in January 1913 and elected to Council at subsequent elections; elected by the Members of the Bengal Legis. Council as President of High Tribes Committee; elected first Deputy President of the Reformed Council in Feb. 1921; acted as Presidt. from May 1921 to Nov. 1922; introduced the Bengal Primary Education Bill in the Bengal Legis. Council and got it passed by the Council in 1919. *Publications:* (1) "A History of the Native States of India"; Local Self-Government in Bengal; Financial Condition of Bengal; "Suggestions for the solution of the present Economic problem," etc. *Address:* Behala, Calcutta.

RUNCHORELAL. SIR CHINUBHAI MADHOWLAL, Second Baronet, *cr.* 1913. *b.* 18 April 1906. *S.* of 1st Baronet and Sulochana, *d.* of Chunilal Khushalrai. *S.* father, 1916. *m.* 30th November 1924 with Tanumati, *d.* of Javerlal Bulakhiram Mehta of Ahmedabad. (Father was first member of Hindu community to receive a Baronetcy). *Heir*: None. *Address*: "Shantikunj", Shahibag, Ahmedabad, Bombay.

RUSHBROOK-WILLIAMS, LAURENCE FREDERIC, M.A., B. Litt. (Oxon.), 1920, O.B.E., 1920, C.B.E. (1923), Foreign Member, Patiala Cabinet. *b.* 10 July 1891. *m.* 1923, Freda *e. d.* of Frederick Chance, one *s.* one *d.* *Educ.*: University College, Oxford; Private Study in Paris, Venice, Rome. Lecturer at Trinity College, Oxford, 1912 ; travelled Canada and U.S.A. 1913 : Fellow of All Souls, 1914 ; attached General Staff, Army Headquarters, India, 1916. Professor of Modern Indian History, Allahabad University, 1915-1919 : on special duty with the Government of India, 1918-1921 in India, England and America : Official Historian of the Indian Tour of H.R.H. the Prince of Wales, 1921-22 : Secretary to the Indian Delegation at the Imperial Conference, 1923 : Director of Public Information, Government of India, to end of 1925. Political Secretary to Representative of the Indian Princes at the League of Nations 1925 and Substitution Delegate to the Assembly. *Publication*: History of the Abbey of St. Albans; Four Lectures on the Handling of Historical Material; Students' Supplement to the *Ain-i-Akbari*; A Sixteenth Century Empire Builder: India under Company and Crown: India in 1917-18; India in 1919: India in 1920 : India in 1921-22 · India in 1922-23: 23-24 : 1924-25 : General Editor, "India of Today" and India's Parliament, Volumes 1,2,3, *seq.* *Address*: Patiala.

SABNIS, RAO BAHADUR SIR RAGHUNATHRAO V., KT. (1925), B.A., C.I.E. *b.* 1 April 1857. *Educ.*: Rajaram H.S., Kolhapur ; Elphinstone Coll., Bombay. Ent. Educ. Dpt.; held offices of Huzur Chitnis and Ch. Rev. Officer, Kolhapur ; Diwan, Kolhapur State, 1898-1925, retired (1926.) Fellow of Royal Soc., of Arts. Asiatic Soc., Bombay Br. *Address*: Shahupuri, Kolhapur.

SACHIN, MAJOR HIS HIGHNESS NAWAB SIDI IBRAHIM MUHAMMAD YAKUT KHAN MUBARIZ-UD DAULA NUSRAT JUNG BAHADUR NAWAB OF, A.D.C. *b.* 1886, and succeeded as an infant in following year. Installed May 1907 ; Hon. Captain, 1909 ; Major, 1921. State has area of 49 sq. miles and population of 60,000. Salute of 9 guns, personal 2 guns extra. *Educ.*: Rajkumar Coll., Rajkote ; Mayo Coll., Ajmer; Imp. Cadet Corps. Served G.E.A. in 1914-15. *Address*: Sachin, Surat.

SADIQ HASAN, S., B.A., Bar-at-Law, Member, Legis. Assembly, 1924-26 ; President of Messrs. K. B. Shaikh Gulam Hussun & Co., Carpet Manufacturers. *b.* 1888. *Educ.*: Amritsar, Lahore and London. President, Moslem League, Amritsar ; President, Anjuman Islamia, Amritsar ; Municipal Commissioner ; takes active interest in Moslem education and political movements ; President, Punjab and N. W. F. Province Post Office and R. M. S. Association, 1924-25 ; Presided over All-India Moslem Kashmiri Conference, 1928 ; Chairman, Board of Directors, Muslim Bank, Lahore. *Address*: Amritsar.

SAGAR, LALA MOTI, RAI BAHADUR, B.A., LL.B., Rai Bahadur (1922) ; Advocate, High Court of Judicature at Lahore. *b.* 23 Nov. 1873. *Educ.*: Forman Christian College, Lahore. Passed LL.B. in 1896. Began to practise as a pleader at Delhi in 1897, where he soon acquired a lucrative practice. Shifted to Lahore in the Chief Court in 1915, officiated as a Judge of the High Court in 1921 for 4 months ; was appointed an additional Judge of the High Court in 1922 ; made an Advocate in August 1921 ; resigned Judgeship and reverted to the Bar in October 1924 ; appointed Honorary Vice-Chancellor of the Delhi University in May 1926 ; has been a Fellow of the Punjab University for several years, having been elected by the registered graduates. Was granted Hon. degree of LL.D. by the Delhi University in 1928 ; was appointed Vice-Chancellor, Delhi Univ, for a further period of two years in May 1928. *Address*: Advocate, Lahore.

SAGRADA, RT. REV. EMMANUEL ; Vicar Apostolic of Eastern Burma and Titular Bishop of Trina since 1909. *b.* Lodi, 1860. *Address*: Toungoo, Burma.

SAIYID ABDUR RAHMAN, KHAN BAHADUR, M.L.C., Retired Dy. Commissioner, Akola (Berar). *b.* 1864. *Educ.*: St. Francis de Sale's, Nagpur. Supdt., Commissioner's Office, Hoshangabad ; Extra Asstt. Commissioner ; Dy. Commissioner, Akola (Berar), 1919-1921 ; Dy. Commissioner, Yeotmal ; Per. Asstt. to Commissioner of Berar in C. P. Commission ; Official Receiver, Berar ; President of many Municipalities and District Boards ; Berar Mahomedan representative in C. P. Council. *Address*: Akola.

SAILANA, HIS HIGHNESS RAJA SANGH BHARAT DHARMA NIDHI DILEEP SINGH BAHADUR OF. *b.* 18 March 1891. Succeeded the Gadi, 14 July 1919. *m.* first to the *d.* of H. H. the Maharawat of Partabgarh and after her death to the *d.* of the Rawat of Meja in Udaipur. *Educ.*: Mayo College, Ajmer. Salute 11 guns. *Address*: Sailana, C. I.

SAIYED MAHMUD PADSHAH, THE HON. SAHIB BAHADUR, B.A., F.A.U., Member, Council of State, Vakil. *b.* 1887 *m.* *d.* of the late Sowcar Syed Mir Hussain Sahib Bahadur, a Mahomedan millionaire of Chittoor. *Educ*: Presidency College, Madras. Joined the Bar in 1916 ; became Member of the Reformed Madras Legislative Council, 1921 ; agitated in the Council for the separation of the Judical and Executive functions, the Temperance Movement, encouragement of cottage industries etc. First Joined the Council of State in 1924 and got re-elected to it in 1925 ; Became a Fellow of the Andhra University and President of Madras Presidency Muslim League in 1926. Presided over All-India Press Employees Conference held in Calcutta in 1927. *Address*: Bellary.

SAKLATVALA, NOWROJI BAPUJI, C.I.E.(1923) J.P., Director, Tata Sons, Ltd. *b.* 10 Sept. 1875. *m.* Goolbai, *d.* of Mr. Hormasji S. Batlivala. *Educ.:* at St. Xavier's College. Chairman, Bombay Millowners' Association, 1916; Employers' Delegate from India to the International Labour Conference, Geneva, 1921; Member, Legislative Assembly; representing Bombay Millowners' Association, 1922. *Address:* Bombay House, Fort, Bombay.

SALMOND, SIR WILLIAM GEOFFREY HANSON, K.C.B. (1926); K.C.M.G. (1919); C.M.G. (1919); C.B. (1918); D.S.O. (1917); Air Vice-Marshal, R.A.F., late R.A. Commanding Royal Air Force in India, *n.* 19 Aug. 1887. *s.* of Major-General Sir W. Salmond *m.* 1910, Margaret *e.d.* of late William Carr of Ditchingham Hall, Norfolk; one *s.* three *d.* *Educ:* Wellington College; Royal Military Academy, Woolwich. Joined Royal Artillery, 1898; Staff Coll., Camberley, 1911-12; served South African War, 1899-1902 (Queen's Medal, seven clasps); China, 1900 (medal); European War, 1914-18; G.S.O. 2, R.F.C.H.Q.; Commanded No. 1 Squadron, R.F.C., 1915; 5th Wing, 1915-16; R.A.F. Middle East, 1916-21 (K.C.M.G., C.B., D.S.O., despatches, Orders of the Nile, and St. Saviour of Greece); Air Member for Supply and Research Air Council, Air Ministry, 1922-26. *Address:* Stirling Castle, Simla; and 34 Hyde Park Gardens, London.

ST. JOHN, LT.-COLONEL HENRY BEAUCHAMP, C.I.E., C.B.E., Agent to the Governor-General and Chief Commissioner, Baluchistan. *b.* 26 Aug. 1874, *m.* Olive, *d.* of Colonel C. Herbert, C.S.I., 1907. *Educ:* Sandhurst. Ent. Army, 1893. *Address:* Quetta.

SAMALDAS, LALUBHAI, *see* LALUBHAI.

SAMIULLAH KHAN, M., B.A., LL.B., M.L.A Pleader; President, Railway Mail Service Association (Branch) Nagpur (1926). *b.* 1889. *m.* Miss Irasunnisa A. Jalil. *Educ.:* M.A.O. College, Aligarh. Worked on many war committees during the war; Secry., Prov. Khilafat Committee, C.P., 1920-24; Secry., Anjuman High School, Nagpur (1923-); Vice-Presdt., Nagpur Municipal Committee since 1921; one of the secretaries of the Silver Wedding Fund at its start; was Member, All-India Congress Committee and the Central Khilafat Committee from 1921-23; non-co-operated from practice from 1921-23; at present a member of Swaraj party, Whip of the Swaraj Party in the Legislative Assembly, 1925, and a Member of the Executive Committee of the Anjuman High School Institute since 1915. *Address:* Sadar Bazar, Nagpur, C.P.

SAMS, HUBERT ARTHUR, C.I.E. (1919). Director-General, Posts and Telegraphs, April 1927. *b.* 8 May 1875. *m.* Millicent Helen Langford. *Educ.:* St. Paul's School and Peterhouse, Cambridge, B.A., (1897). Entered I.C.S., 1898. Punjab Commission, 1899-1907; P.M.G., 1907; Director of Postal Services, M.E.F., 1917-19; Temp. Lt.-Col., R.E., Aug. 1917—May 1919. Three times mentioned in despatches. Postmaster-General, Bombay Circle, 1920-1922; Offg. D.G., 1922-23, 1924 and 1926. *Publication:* Post Office of India in the Great War. *Address:* c/o Lloyds Bank, Simla.

SAMTHAR, H. H. MAHARAJA SIR BIR SINGH DEO, MAHARAJA OF, K.C.I.E. *b.* 8 Nov. 1865. *S.* 1896. *Address:* Samthar, Bundelkhand.

SANJANA, SHAMS-UL-ULEMA DASTUR DARAB PESHOTAN, B.A., J.P., Senior Head Priest of the Parsis, Bombay. *b.* 18 November 1857. *m.* Shirinbai Rustomji B. Badshah. *Educ.:* Elphinstone High School, Proprietary School, and Elphinstone College, Hon. Fellow and Examiner in Avesta and Pahlavi, University of Bombay, since 1887; awarded Sir Jamsetji Fellowship, 1885; and Sir Jamsetji Gold Medal, 1889; Principal, Sir Jamsetji Zarthosti Madressa since 1899; Editor of "Pahlavi Vendidad," "Nirangistan" and "Maino-i-Kherad;" Editor and Translator of "Pahlavi Karname Ardashir," and "Pahlavi Dinkard," of which Vol. 18 was published very recently. Has translated into English German works and papers by Geiger, Spegel and Windischmann (Clarendon Press, Oxford). Has preached a number of religious, sermons and published many English and Gujarati essays and papers on Parsi history and religion and on "The Alleged Practice of Consanguinous Marriages in Ancient Iran" "The Position of Zoroastrian Woman in Remote Antiquity and Dastur Tansar's letters to the "Court of Tabaristan." Early in 1926 European and Indian Scholars issued a Commemorative Volume in honour of the Dastur, Entitled "Indo—Iranian Studies." In June 1927 on the occasion of the Fourth Centenary Jubilee, the Doctorate of Philosophy was conferred on the Dastur by the University of Marburg (Germany). *Address:* Cumballa Hill, Bombay.

SANKARANARAYANA AYYAR, S., M.A., B.L., Advocate, Tinnevelly. *b.* 14 May 1896; *Educ:* Presidency Coll., Madras, Law Colleges. Madras and Trivandrum. Graduated in Arts 1920, and in Law 1922. *m.* Rukmani Ammal of Kodangudi, Tanj. Dist. (1926). Zamindar of Nayinaragaram, Tinnevelly District. Proprietor of Kayatar Estate, Tinnevelly Dist.; Winner of S.P.C.A. Gold Medal 1920. Special Lecturer, Elementary Teachers' confce. at Tinnevelly, 1923. Chairman of the Reception Committee first Tinnevelly Postmen's Confce., 1924. Witness, Tamil University Committee, 1927; Author of several articles on Metaphysics, Law and Education, as "Do Finite Individuals have a substantive or an Adjectival Mode of Being," "Maintenance to a widow—Quantum and Style of Life," "The Necessity for a Conscience Clause in Indian Educational Institutions," etc. Has contributed much to public discussion on the Madras Univ. Act, Madras Hindu Religious Endowments Act, and other enactments of the legislature. *Address:* Zamindar of Nayinaragaram, Vannarpet, Tinnevelly.

SANKARAN NAIR, SIR CHETTUR, KT. cr. 1912; C.I.E., 1904; B.A., B.L., Member Council of State, (1925). *b.* 11 July 1857. *Educ.:* Madras Presidency College, High Court Vakil; Govt. Pleader and Public Prosecutor to the Govt. of Madras; Advocate-General;

Judge, High Court, Madras; for many years a member of Madras Legis. Council; President of the Indian National Congress at Amraoti: President of the Indian Social Conference at Madras; President of the Indian Industrial Exhibition, Madras; Founder and for some time Editor, Madras Review and Madras Law Journal: Member of Governor-General's Executive Council in India, 1915-1919; Mem. of Council of the Secretary of State for India, 1919-1921. Elected Member, Council of State, Novr. 1925. Chairman, Central Legislature Commitee with Simon Commission 1928. *Publications:* Contributed articles to English periodicals; author of "Gandhi and Anarchy" *Address:* Cosmopolitan Club, Madras.

SANT, MAHARANA SHRI JORAWARSINHJI, RAJA OF. *b.* 24 March 1881; *S.* 1896. *Address.* Santrampur, Rewa Kantha.

SAPRU, SIR TEJ BAHADUR, M.A., LL.D., K.C.S.I (1923). *b.* 8 Dec. 1875. Widower. *Educ.*: Agra College, Agra. Advocate, High Court, Allahabad, 1896-1926; Member, U.P. Leg. Council, 1913-16; Member, Imperial Leg. Council, 1916-20; Member, Lord Southborough's Functions Committee, 1918-1919; Member of Moderate Deputation and appeared as a witness before Lord Selborne's Committee in London, 1919; Member, All-India Congress Committee (1906-1917); Presdt., U.P. Political Confce., 1914; Presdt., U.P. Social Confce. (1913); Presdt., U.P. Liberal League, 1918-20; Fellow, Allahabad Univ., 1910-1920; Member, Benares Hindu University Court and Senate and Syndicate; Law Member of the Governor-General's Executive Council, retired (1922). Member of the Imperial Conference in London (1923); presided over the All-India Liberal Federation, Poona (1923); Member of the Reforms Enquiry Committee, 1924. *Publications:* has contributed frequently to the press on political, social and legal topics; edited the *Allahabad Law Journal*, 1904-1917. *Address:* 19, Albert Road, Allahabad.

SARDAR GHOUS BAKSH KHAN RAISANI. SIR, K.C.I.E., premier Chief of Sarawans; Baluchistan.

SARKAR, JADUNATH, M.A. (English Gold Medal), C.I.E., Premchand Roychand Scholar (Mouat Gold Medal). Hon. Member of Royal Asiatic Society of Great Britain (1923); Sir James Campbell Gold Medalist Bo. Br. R.A.S.; Vice-Chancellor, Calcutta University 1926-28 Indian Educational Service (ret.) *b.* 10 December 1870. *m.* Kadambini Chaudhuri. *Educ.* Presidency Coll., Calcutta,. Some time Univ. Professor of Modern Indian History, Hindu University of Benares (1927-19). Sir W. Meyer Lecturer (Madras University 1928, Reader in Indian History, Patna University (1920-22). *Publications*: India of Aurangzib, Statistics, Topography and Roads (1901): History of Aurangzib, 5 Vols.; Shivaji and His Times; Mughal Administration; Studies in Mughal India; Anecdotes of Aurangzib; Chaitanya: His Life and Teachings; Economics of British India; Edited and continued W. Irvine's *Later Mughals*, 2 Vols. *Address*: Calcutta and Darjeeling.

SARMA, SIR B. NARSIMHA, K.C.S.I. *b.* Jan. 1867. *Educ.:* Hindu Coll., Vizagapatam. Rajamundry Coll. and Presy. Coll., Madras: Subsequently teacher Professor, and at the Bar in Vizagapatam and Madras.. Law Member of Governor-General's Executive Council, 1920-25 President, Railway Rates Advisory Committee (1926). *Address*: Calcutta.

SARMA, S. K., B.A., B.L., Pleader, *b.* 4 April 1880. *Educ*: S. P. G. College, Trichinopoly. Founded the *Wednesday Review* in 1905 and Asstt. Editor till 1917. Asstt. Editor and leader writer, *Indu Prakash*, Bombay, 1906-07: Witness Royal Commission On Indian Currency and Finance (1919, and Indian Taxation Inquiry Committee (1924). *Publications:* 'Monetary Problems", "A Note on the Rise of Prices in India", "The Exchange Crisis" and "Towards Swaraj." *Address:* Teppakulam, P. O. Trichinopoly.

SARVADHIKARY, SIR DEVA PRASAD, KT., C.B.E., C.I.E.; M.A., B.L. (Calcutta), LL.D., (Aberdeen), LL.D. (St. Andrews), Suriratna (Navadwip), Vidyaratnakar (Dacca), Vidya Sudhakar (Benares), Jnan Sindhu (Puri), Advocate and Solicitor. Fellow, Calcutta University, Benares Dacca University, and Delhi University; Dean, Faculty of Law and late Vice-Chan. and Dean, Faculty of Arts Calcutta Univ.; late Mem. of Council of State, late member of Indian Legislative Assembly, and Bengal Council. *b.* 1862. *m.* 1883, Nagendranandini. 2 *s.* and 3*d.* *Educ.*: Ramsheshwarpore Sanskrit College, Hare and Howrah Schools: Presidency College, Calcutta. For several years Mem. of Mun. Corpn. of Calcutta; Mem. of Imp. Lib. Vice-President, Calcutta Rotary Club, W.M. Lodge Anchor and Hope. Trustee, Imp. Museum; Pres., various literary, social and philanthropic societies and President, Calcutta Licensing Board; Calcutta Temperance Federation, Anti-Smoking Society "The Refuge"; Calcutta University Corps Committee. Incorporated Society of Law; Vice-President, Indian Association and National Council of Education, Sahitya Parishad, Asiatic Society, and President Calcutta University Institute. *Publications*: "Notes and Extracts," "Three Months in Europe," "Prabash Patra," Travels in South Africa. *Address*: Prasadpur, 20, Suri Lane, Calcutta.

SASSOON, SIR (ELLICE) VICTOR, 3rd Baronet, M. L.A. *cr.* 1909. *b.* 30 Dec. 1881. *s.* of 2nd Baronet and Leontine, *d.* of A. Levy; *s.* father 1924. *Educ.*: Harrow; Trinity College, Cambridge. Chairman E. D. Sassoon & Co, Ltd.. etc., late Capt., R.A.F. *Address:* Bombay.

SASTRI, SIR CALAMUR VEERAVALLI KUMARASAMI, KT. (1924). *b.* July 1870. *Educ.*: Presy. and Law Colls., Madras: B.A. (1890); B.L (1893), Vakil, 1894, Judge, Small Causes Court, 1905-06; Judge, Madras City Court, 1906-12; District and Sessions Judge, Ganjam, 1912-14; Member of the Rowlatt Committee, 1918; Chairman, Labour Committee, 1920; Judge, Madras High Court, 1914-20; Member, Criminal Procedure Code Committee, 1917; Offg. Chief Justice, Madras High Court from July 1926. *Address*: Kalamur House, Madras N. E.

SASTRI, THE RT. HON. V. S. SRINIVASA, P.C. 1921. *b.* Sept. 22, 1869. *Educ.:* at Kumbakonam. Started life as a Schoolmaster; joined the Servants of India Society in 1907; succeeded the late Mr. G. K. Gokhale in its Presidentship in 1915; Member, Madras Legis. Council, 1913-16; elected from Madras Presidency to Imperial Legis. Council, 1916-20. Closely associated with Mr. Montagu during his tour in India in 1918; Member, Southborough Committee; gave evidence before Joint Parliamentary Committee on Indian Reform Bill, 1919; served on Indian Railway Committee; represented India at Imperial Peace Confce., 1921, and at the meeting of the League of Nations at Geneva and the Washington Confce. on the reduction of naval armament during the same year. Appointed Privy Councillor and received the freedom of the City of London, 1921; undertook a tour in the Dominions as the representative of Government of India, 1922; elected Member, Council of State, 1921. High Commissioner for India in South Africa 1926-29. *Address*: Servants of India Society, Bombay or Poona.

SAUNDERS, COLONEL MACAN, D.S.O., Deputy Director, Military Intelligence, Army Headquarters, India. *b.* 9 Nov. 1884. *m.* Marjory. *d.* of Francis Bacon. *Educ.:* Malvern College; R.M.A., Woolwich. Lieut., Royal Field Artillery, 1903; Lieut., Indian Army, 1907; Capt., 1912; Major, 1918; Bt.-Lieut.-Col., 1919; Col. 1923, in India till 1914, except for a year in Russia; Staff Capt., 2nd Royal Naval Brigade, 1914, operations in Belgium and siege of Antwerp; Operations in Gallipoli, 1915, from 1st landing to evacuation; G.S.O. 3 in Egypt to March 1916; Brig-Major, Eastern Persian Field Force to April 1917; Operations in Mesopotamia, 1917-18; G.S.O. 2 and Intelligence Officer with Major-Gen. Dunsterville's Mission through N. W Persia. to the Caucasus, 1918; G.S.O. 1, Caucasus Section, G.H.Q. British Salonika Force, 1919 (wounded, despatches five times, D.S.O Bt.-Lt.-Col.); P.S.C. Camberley, 1920; Military Attache, Teheran, Persia, 1921-24; Appointed D.D.M.I., Army Headquarters (1924). *Address:* General Staff, Army Headquarters (India), Simla.

SAWANTWADI, HIS HIGHNESS CAPTAIN KHEM SAVANT V. *alias* BAPUSAHEB BHONSLE, RAJE BAHADUR SARDESAI SAHEB OF. *b.* Aug. 20th 1897. *m.* Princess Shri Lakshmi Devi of Baroda. *Educ.:* Malvern College, England. Served in the Great War at Mesopotamia from Oct. 1917 to March 1919; attached as Hon. Officer to 116th Mahrattas. *Address:* Sawantwadi.

SCHUSTER, THE HON'BLE GEORGE ERNEST C.B.E., M.C., Finance Member, Government of India. *b.* 1881. *m.* 1908 Hon. Gwendolen, *d.* of Lord Parker of Waddington; two *s.* Educated Charterhouse (Scholar); New College, Oxford (Classical Exhibitioner), 1st Class in Greats, 1903, Bar-at-Law, 1905; partner in Schuster Son & Co.; and Director of numerous companies, 1906-1914; served European War 1914-18, with Q. O. Oxfordshire Hussars and on staff in France; North Russia 1919; A.A.; and Q.M.G. Murmansk (despatches four times, M.C., C.B.E., Order of St. Vladimir); travelled Central Europe to report on economic conditions for Anglo-Danubian Association, Ltd. 1920; Chief Assistant to Organiser of International Credits under League of Nations, 1921; Member of Advisory Committee to Treasury under Trade Facilities Act; Financial Secretary, Sudan Government, 1922. Chief Assistant to Organiser of International Credits under League of Nations, 1921; Member of Advisory Committee to Treasury under Trade Facilities Act; Chairman of Advisory Committee to Colonial Secretary on East African Loans; Economic and Financial Adviser, Colonial Office, 1927-28. *Address:* Government of India, Delhi or Simla.

SCOTT, GAVIN, M.A., C.I.E. (1922), I.C.S., Municipal Commissioner for the City of Rangoon. *b.* 10 Aug. 1876, *m.* Eileen Marie Nolan. *Educ.:* Glasgow University. Joined I.C.S., 1899; posted to Burma, 20 Dec., 1899. *Address*: Kilmanie, 21, Mount Pleasant Road Kokine, Rangoon.

SEAL, SIR BRAJENDRANATH, KT., M.A., Ph. D., D.Sc., Vice-Chancellor, Mysore University, George V., Prof. of Mental and Moral Science, Calcutta Univ., 1914-1920. Extra Member of Council, Mysore Government, 1925-26. *b.* 3 Septem. 1864. *Educ.:* Gen. Assembly's Institution, Calcutta University: Del., Orientalist Congress, Rome, 1899; opened discussion at 1st Univ. Races Congress, London, 1921; Mem., Simla Committee for drawing up Calcutta Univ. Reg., 1905; Chairman, Mysore Constitutional Reforms Committee, 1922-23: Author of New Essays in Criticism, Memoir on Co-efficients of Numbers; Comparative Studies in Vaishnavism and Christianity; Race Origins, etc. *Address:* Mysore, S. India.

SELL, REV. CANON E., B.D. (Lambeth), D. D. (Edin.); Kaisar-i-Hind Gold Medallist, *b.* 1839; *Educ.:* C.M.S. Coll.; London. Arr. in India, 1865; Numerous publications on the history of Islam and on Old Testament Literature. *Address:* Vepery, Madras.

SEN, JITENDRANATH, M.A.; Calcutta Univ. Sen. Prof. of Phy. Sc., City Coll., since 1903: *b.* 1875. *m.* 1899. *Educ*: Hindu Sch.; Presidency Coll.; City Coll. and Sc. Assoc., Calcutta, *Publications*: Elementary Wave Theory of Light and other small books. *Address*: 1, Muddun Mohun Sen's Street, Calcutta.

SEN, RAI BAHADUR NISI KANTA, B.A., B.L., M.L.A., General Manager, Estate Nuzurgunj Purnea City, and Advocate *b.* 8 March 1868 *m.* Mrs. Sen. *Educ.:* Dacca College. Entered Bar in 1894; was Govt. Pleader up to 1912; nominated member, Behar and Orissa Leg. Council in 1914; renominated in 1916, Elected Member, Legis. Assembly in 1921; acted for 6 months as member, Special Tribunal during Arrah-Gaya Bakr-i-d disturbances; was Vice-Chairman, Purnea Municipality for 7 years; Vice-Chairman, Purnea Dist. Board, for 12 years up to 1921 when elected Chairman, Purnea District Board. Again Re-elected as Chairman, Dist. Board, Purnea in 1924. and again re-elected as Chairman,

District Board, Purnea in 1927. *Address*: Sen Villa, Purnea (Bihar.)

SETALVAD, SIR CHIMANLAL HARILAL, K.C.I.E. (1924) LL.D., Advocate, High Court, Bombay, *b.* July 1866. *m.* Krishnagavri, *d.* of Nurbheram Rughnathdas, Govt. Pleader, Ahmedabad. *Educ.*: Elphinstone College, Bombay. Pleader, High Court, Bombay; Admitted as Advocate High Court; Member, Southborough Reforms Committee, 1918; Member, Hunter Committee, 1919; Additional Judge, Bombay High Court, 1920; Member, Executive Council of Governor of Bombay, Jan. 1921 to June 1923. and Vice-Chancellor Bombay University 1917-1920, *Address*: Setalvad Road, Malabar Hill. Bombay.

SETALVAD, RAO BAHADUR CHUNILAL HARILAL, C.I.E., Bar.-at-Law, formerly Chief Presidency Magistrate, Bombay. *Address*: Bombay.

SETH, RAI BAHADUR KUNWAR BISHESHWAR DAYAL, B.Sc., M.L.C., F.C.S (London), M.R.A.S. (London), Taluqdar of Muizuddinpur. *Educ.*- at Canning College Lucknow. Member of the Board of High School and Intermediate Education U. P.; Member of the Court of Lucknow University; President of the Board of Trustees of Seth Jai Dayal High School Biswan; Member of the managing body of Colvin Taluqdars' School Lucknow; Trustee of Raja Raghubar Dayal High School Sitapur; Member of the Board of Agriculture U. P.; Member of U. P.; Cattle-breeding Committee; Member of the Court of Wards Advisory Committee Sitapur; Member of the Executive Committee of British Indian Association of Oudh; Member of the United Provinces Legislative Council as one of the representative of British Indian Association of Oudh, Member of U. P. Finance Committee Hony. Special Magistrate. Gave evidence before the Indian Taxation Enquiry Committee in 1925. *Address*: Kotra, Biswan, Dist. Sitapur, Oudh.

SETHNA, THE HON. SIR PHIROZE CURSETJEE. KT., B.A., J.P., O.B.E. (1918); Member, Council of State. *b.* 8 Oct. 1866. Manager for India, Sun Life Assurance Co. of Canada; Chairman, Central Bank of India, Ltd.; Member, Bombay Municipal Corporation; Trustee, City of Bombay Improvement Trust; Trustee, Bombay Port Trust. *Address*: Canada Building, Hornby Road, Bombay.

SETURATNAM IYER, THE HON. MR. M.R., Minister for Development, Madras Government. *b.* 2nd January 1888. *Educ*: National High School and St. Joseph's College, Trichinopoly. Was nominated President of the Taluk Board, Karur; was elected President of the Taluka Board, Kulitalai, elected President of the Trichinopoly Dist. Board; elected President of the Trichinopoly District Educational Council, Assistant Secretary of the Trichinopoly National College and Hon. Assistant Register, Co-operative Societies, Trichinopoly Dist; elected member of the Madras Legistlative Council from 1921. *Address*: Kumara Villa, Edward Elliot Road, Mylapore, Madras.

SHADI LAL, SIR, M.A. (Punjab), 1895, B.A. Honours (Oxford) 1898; B.C.L. Hon. (Oxford) 1899; Boden Sanskrit Scholar (Oxford) 1896; Arden Law Scholar (Gray's Inn.) 1899; Honoursman of Council of Legal Education, 1899; Special Prizeman in Constitutional Law, 1899; Chief Justice, High Court, Lahore. *b.* May 1874. *Educ.*: at Govt. Coll., Lahore, Balliol Coll., Oxford. Practised at the Bar 1899-1913; Offg. Judge, Punjab Chief Court, 1913 and 1914. Permanent Judge, 1917; Judge, High Court, Lahore, 1919; Chief Justice, May 1920. Elected by Punjab Univ. to the Leg. Council in 1910 and 1913. Fellow and Syndic, Punjab University. *Publications*: Lectures on Private International Law, Commentaries on the Punjab Alienation of Land Act and Punjab Pre-emption Act, etc. *Address*: Lahore.

SHAFI, MIAN SIR MUHAMMAD, KHAN BAHADUR, K.C.S.I. (1922); C.I.E. (1916); D. Litt (Aligarh); LL.D. (Delhi); Presdt., Punjab National Liberal League, Punjab Provincial Muslim League, Anjuman-i-Raiyani i-Hind and Cosmopolitan Club, Lahore; Pro-Chancellor, Delhi University, 1922-1925; President, Anjuman-i-Hinnayat-i-Islam, Lahore; Legal Adviser, Bhawalpur State. *b.* 10 March 1869. *Educ*: Govt. College and Forman Christian College, Lahore. Scholar and Barrister, Middle Temple; President All India Urdu Confce., 1911; President Islamia College, Committee 1907-19; President, All-India Muslim League, 1913; Member, Court of Muslim University, Aligarh; President, All-India Mahomedan Educational Conference, 1916; President, High Court Bar Association, 1917-1919; President, Punjab Prov. Bar Confce., 1919; Member, Punjab Legislative Council and Imperial Legislative Council from 1909-1919; Education Member, Government of India, 1919-22. Vice-President of the Executive Council and Law Member, Govt. of India (1922-24), President, Indian Soldiers' Board 1924 and Punjab Muslim Educational Conference, 1926. *Publications*: "Punjab Tenancy Act with notes," "Provincial Small Cause Courts Act with notes" and "Law of Compensation for Improvements in British India". *Address*: "Iqbal Manzil," Mozang Road, Lahore.

SHAHAB-UD-DIN THE HON'BLE KHAN BAHADUR, CHAUDHRI, B.A., LL.B., Advocate, High Court, President, Punjab Legislative Council; Editor and Proprietor, "Indian Cases," and "Criminal Law Journal" Member, Legislative Assembly for 3 years; President, Municipal Committee, Lahore, for 4 years and elected President, Punjab Legislative Council, Re-elected President, Punjab Legislative Council in January 1927. *Educ*: Government Coll: and Law Coll., Lahore. Started Criminal Law Journal of India in 1904 and Indian Cases in 1909. Was first elected member, Lahore Municipal Committee in 1913; President of the Corporation in 1922, Elected member, Punjab Leg. Council.; re-elected President, Lahore Municipal Committee, 1924. *Publications*: The Criminal Law Journal of India: Indian Case and two Punjabi poems. *Address*: "A Mumtaz", 3, Durand Road, Lahore.

SHAHANI, SAHIBSING CHANDASING, M.A. Principal, D.J. Sind College, Karachi, Zamindar and Member, Legislative Assembly (1920). *b.* 1867. *m.* Rijhi Tejumal Mansukhan. *Educ.:* Bombay and Poona. Professor, Wilson College, Bombay, 1892-96; Prof., D.J. Sind Coll., Karachi, since 1896, 1916 Principal, D. J. Sind College, 1916-27; Member Legislative Assembly, 1921-23; President Sind Hindu Association, 1925-27; President Sind Hindu Zemindar's Sabha, 1927. *Publications:* Umar Khayyam; Shah-jo-Rasalo; Sind Grasses, Compromise, etc. *Address:* D. J. Sind College, Karachi.

SHAH MOHAMMAD ZUBAIR, Barrister-at Law. *b.* 1888. *m. d.* of Shah Mohammad Ayub of Monghyr. *Educ:* Middle Temple. Practised as barrister at Patna 1912-13; at Monghyr, 1914-1920. Non-co-operated and gave up practice in 1920. Presided over Annual session of Bihar Provincial Confce. in 1925 at Purulia; elected President, Bihar Provincial Congress Committee in 1925 and again in 1926; elected to Council of State in November 1925. Resumed practice in Oct. 1927, Elected Chairman, Dstrict Board in 1924 and 1927. *Address:* Fort, Monghyr.

SHAHPURA, RAJADHIRAJA SIR NAHAR SINGH, K.C.I.E. *b.* 7 Nov. 1855. *S.* Shahpura Gaddi by right of inheritance, 1870. *Address:* Shahpura, Rajputana.

SHAKESPEAR, ALEXANDER BLAKE, C.I.E., Merchant; partner in firm of Begg, Sutherland & Co. *b.* 1873. *Educ.:* Berkhampstead, Was Sec., Upper India Chamber of Commerce. 1905-12. *Address:* Cawnpore.

SHAMSHER SINGH, SIR SARDAR, SARDAR BAHADUR, K.C.I.E., C.I.E.; Ch. Min., Jind State. *b.* 1860. *Educ.:* Jullundur and Hoshiarpur H. S. and Govt. Coll., Lahore. Served during Afghan War, 1879-80, with march from Kabul to Kandahar; Ch. Jud. of State High Court, 1899-1903. *Address:* Sangrur, Jind State.

SHANKARSHASTRI, NARASINHSHASTRI PANDIT JOTIRMARTAND, Astronomer, Astrologer and Landlord, *b.* 19 Dec. 1884. *m.* Anna Purnabai, *d.* of Vedamurti Chendramadixit of Laxmeshwar Miraj Senior. *Educ.:* Hosaritti, Taluka Haveri, Dharwar. Compiler of the Annual Indian Calendar known as "Hossritti Punchang"; Publisher of the annual general predictions; *Publications:* Annual Indian Calendar; Bhamini-Dipika in Sanskrit (a treatise on Astrology); Kalachandrika in Sanskrit Sanhita Tajak-Sara (a treatise on Astrology) with Commentary in Marathi; Daivanja Ratnakar in Sanskrit (a treatise on Astrology); Griha Ratna Mala in Sanskrit (a treatise on Astronomy), and booklets regarding the administrations of H. E. Lord Irwin, Viceroy of India and of H. E. Sir Leslie Wilson, Governor of Bombay, and Life of Pant Bale-Kundri Maharaj of Belgaum. *Address:* Haveri, Taluka Haveri, Dharwar Dist.

SHARPE, WILLIAM RUTTON SEARLE, J.P., M. Inst. I., Deputy Chairman, Bombay Port Trust. *b.* 11 Dec. 1880. *m.* Kate, third *d* of the late T. H. Marsh; 1 *d.* *Educ.* City of London School and Neuville Academy, Switzerland, Accountant and Branch Manager, Grindlay & Co., Ltd., 1902-1923; joined Bombay Port Trust, Dec. 1913; Chief Accountant, acting and s. p. t. 1914-18; Secretary 1918-1923; Deputy Chairman, 1923, Late Captain, Bombay Battalion, A.F.I.; Chairman St. George's Hospital Nursing Association. *Address:* C/o Grindlay & Co., Ltd., Bombay.

SHASTRI, PRABHU DUTT, Ph.D. (Kiel), B. Sc. Litt. Hum. (Oxon.), M.A. B.T., Hon. M.O.L. (Punjab); Vidyasagar (Calcutta); Shastra-Vachaspati (Nadia); I.E.S.; Sen. Prof. of Mental and Moral Phil. in Presidency Coll., Calcutta, 1912-1926; offg. Principal, Hooghly Govt. College, 1927. *b.* 20 June 1885. *Educ.:* Universities of Lahore, Oxford, Kiel, Bonn and Paris. Del. to and Sectional Pres. at 4th Int. Congress of Philosophy held at Bologna, 1911; Head of Dept. of Philosophy, since 1912, Calcutta Univ. Lect. in Phil. and Sanskrit, 1912-15; invited to lecture in Universities of Geneva, Florence and Rome, 1913-14. Visited the U. S. A. and Canada in 1920-22 and invited to address the Universities of Harvard, Cornell, Princeton, Yale, Johns Hopkins and Toronto. Invited as Sectional President at 5th International Congress of Philosophy, Naples, 1924. *Publications:* Several works and articles on philosophical, educational, literary, religious and social subjects. *Address:* Hooghly College, Chinsura; or Bharati-Bhawan, 3, Multan Road, Lahore.

SHEIKH, MAHAMADBHAI, AMIR, Dewan, Junagadh State *b.* 18th October 1901; First Class Amir of the Junagadh State, holding a hereditary Jagir. *Educ:* at the Mayo College, Ajmer; visited England in 1913-14 with His Highness the Nawab Saheb. Entered Junagadh State Service in 1920 as Military Secretary to His Highness the Nawab Saheb, and subsequently was appointed Private Secretary to His Highness, and then Huzur Secretary; was appointed Dewan in 1924. *Address:* Sardarbag, Junagadh, Kathiawar.

SHEIKH, MOHAMMED ABDULLAH, A.M.I.E. M. R. San. I. (Lond.), M. Am. C. Inst., Associate Fellow, P. W. Inst. of England, Member, Bombay Engineering Congress Executive Engineer, Projects Divisions, B. B. & C. I. Railway. *b.* 7 April 1883. *Educ.* at Lialkot and Graduate in Civil Engineering of International Correspondence Schools of London. Assistant Nagda-Muttra Railway Construction, 1905-09; Chief Surveyor and Asstt. in charge of Railway Surveys, M. and S. M. Railway, 1909-10, and Khandwa Akola Hingoli Railway Survey 1910-11; Asstt. Engineer in charge of Surveys and Construction of Transmission Line, Tata Hydro-Electric Scheme, 1911-12; Asstt. Engineer, G. I. P. Railway Open Line Construction Survey and Quadrupling and Remodelling Works, Kalyan and Elimination of Reverse Curves and Regrading Schemes between Kalyan and Kassara, 1912-21; Asstt. Engineer and Ag. Dy. Chief Engineer, Back Bay Reclamation Works; Construction of sea wall and storm-water drains and filling operations, 1921-26; Executive Engineer, B. B. & C. I. Railway, in charge of Projects Division. *Publications:* Series of articles in the Indian Journal of Engineering on Back Bay Reclamation Scheme; many articles in the G. I. P.

and B. B. & C. I. Railway Magazines. *Address:* "Karim Mansion", Corner of 1st and Ghod Bunder Road, P. O. Khar, near Bandra.

SHEPPARD, SAMUEL TOWNSEND, Editor of *The Times of India* since 1923. *b.* Bath, Jan. 1880. *Educ.:* Bradfield and Trinity Coll., Oxford. *m.* 1921, Anne, *d.* of the late J. H. Carpenter. Joined the staff of *The Times* (London) as Secretary to the Editor in 1902. Assistant Editor, *The Times of India*, 1907-1923. Temporary Capt. in the Army, 1917-18; employed on the staff of Bombay Brigade. Corresponding Member, Indian Historical Records Commission. *Publications:* Contributed to *The Times* History of the War in South Africa. "The Byculla Club: a history", "Bombay Place-names and Street-names", "A History of the Bombay Volunteer Rifles." *Address: The Times of India*, Bombay.

SHIRRAS, GEORGE FINDLAY, M.A., Principal, Gujarat College, *b.* Aberdeen, 16 July 1885. *m.* 1911, Amy Zara, *o.d.* of late George McWatters, Madras, Civil Service; two *s.* *Educ.:* Robert Gordon's College, Aberdeen; University of Aberdeen; University Prizeman in Economics. Professor of Dacca College, 1909, on special duty under Government of India, Finance Department, 1910-13; Member, Govt. of India Prices Inquiry Committee; on special duty in office of D.P.I., Bengal, 1913-14; Reader in Currency and Finance in Calcutta University, 1914; Member, Government Bengal Statistics Committee, and of Board of Agriculture, India, 1918; on deputation Imperial Statistical Confce, London, on behalf of Govt. of India, Dec. 1919- Feb. 1920; on special duty India Office in connection with League of Nations work, March 1920; attached International Labour Office and Economic and Financial Section, League of Nations, Geneva, 1924 and Ministry of Labour, Industrial Court, and Home Office, London, Labour Departments, Washington, Boston and New York, 1925. Hon. Fellow, Royal Statistical Society, 1920; Major, 4th Gordon Highlanders, (1920 despatches); T.A. Reserve Regimental List, 1921. Director, Labour Office, Government of Bombay, 1921-25; formerly Director of Statistics with the Government of India; Member, Bombay Legislative Council; Fellow of the University of Calcutta; Fellow of the Univ. of Bombay, *Publications:* Some Aspects of Indian Commerce and Industry; Indian Finance and Currency 3rd Impression, 1920; Some Effects of the War on Gold and Silver, 1920; The Science of Public Finance, 1924; Taxable Capacity and the Burden of Taxation and Public Debt (1925); The Future of Gold and Indian Currency Reform (Economic Journal, June 1927); Gold and French Monetary Policy articles on Finance and Indian trade, etc. *Address*: Gujarat Journal, June 1927); Gold and French Monetary Policy (I. Journ of Econ.) articles on Finance and Indian trade, etc. *Address* Gujerat College, Ahmedabad.

SHOUBRIDGE, HARRY OLIVER BARON, Associate Coopers Hill and M. Inst. C. E., Chartered Civil Engineer, Chief Engineer in Sind. *b.* 19 Oct. 1872. *m.* E. Z. Mould. *Educ.:* Westminster School and R.I.E.C. Coopers Hill. Civil Engineer in the Bombay Public Works Department. *Address:* Grindlay and Co., London and Bombay.

SHUTTLEWORTH, GRAHAM DENNISON, Senior Partner, Croft & Forbes, Exchange Brokers, Bombay, *b.* 17 June 1889. *m.* Margaret Ellen Anderson (15 March 1917). *Educ:* St. Lawrence College Ramsgate and Royal Military College, Sandhurst. Commissioned as 2nd Lieut. to 2nd Bn. York and Lancaster Regt. 1909; resigned in 1914 on joining Messrs. Croft & Forbes, Exchange Brokers, Bombay. Enlisted in Lahore Signal Company as Corpl. Despatch rider and proceeded to France, Aug. 1914 with 1st Indian Expeditionary Force. Granted King's Commission as Captain in Middlesex Regt., January 1915; demobilised 1919 and rejoined Croft and Forbes. *Address:* "Waverley", Wilderness Road, Malabar Hill, Bombay.

SIFTON, JAMES DAVID, C.S.I. (1929) C.I.E. (1921), I.C.S.. Member of Governor's Executive Council (1927). Bihar and Orissa (1925), *b.* 17 April 1878. *Educ:* St. Paul's School and Magdalen Coll., Oxford. *m.* Harriete May Shettle of Eye, Suffolk. Joined I.C.S., 1901. Served in Bengal to 1910. Transferred to Bihar and Orissa, Sec. to Govt. in Financial and Municipal Dept. 1917; Deputy Commissioner, Ranchi, 1923, Chief Secretary to Govt. of Bihar and Orissa 1925-27. *Address:* Ranchi, Bihar and Orissa.

SIKKIM, MAHARAJA OF, H. H. MAHARAJA SIR TASHI NAMGYAL, K.C.I.E. (1923). *b.* 26 Oct. 1893; *s.* of late Maharaja Sir Thutob Namgyal, K.C.I.E. of Sikkim. *m.* grand daughter of Lonchen Sholkhang (Regent of Tibet). *Educ.:* Mayo Coll., Ajmer; St. Paul's Sch., Darjeeling. *Address:* The Palace, Gangtok, Sikkim.

SIMLA, ARCHBISHOP OF, since 1911, MOST REV. ANSELM, E. J. KENEALY. *b.* 1864. Entd. Franciscan Order, 1879; Priest, 1887; Guardian of Franciscans, Crawley, Sussex, 1899; Minister Provincial for England, 1902; first Rector of the Franciscan College, Cowley, Oxford, 1906: elected life member of Oxford Union, 1907; Definitor-General, Rome, representing English-speaking provinces, 1908; Visitator-General, Irish Province, 1910. *Address:* Archbishop's House, Simla E.

SIMPSON, TREVOR CLAUDE, C.I.E., Kings' Police Medal (1916), C.I.E. (1927), Inspector-General of Police, Bengal. *b.* 9th February 1877. *Educ*: St. Paul's School, London, W. Appointed to the Indian Imperial Police by the Secretary of State after open competitive examination in London in Novr. 1896; Superintendent of Police, 1906; Inspector-Genera lof Police, 1919; Inspector-General of Police, 1923. *Address*: 16, Harington Mansions, Calcutta.

SINGH, LT.-COL. BAWA JIWAN, C.I.E. (1918) I.M.S. (retd). *b.* 6 May 1863. *Educ.:* Government and Medical Colleges, Lahore and St. Thomas' Hospital Medical Schools, London. Joined I.M.S., 1891. Served in Military Department to 1896; Civil Surgeon, Meiktila, 1896;

Secretary, I.G. Prisons, with Civil Medical Administration, Burma, 1897-1899: Supdt., Central Jail, Insein, Burma, from 1899 to 1909; Inspector-Genl. of Prisons, E. Bengal and Assam, 1910-1912; Inspector-Genl. of Prisons, Behar and Orissa, from 1912-1920; Director, Medical and Sanitation Departments, H. E. H. The Nizam's Govt., 1920-23; and Director, Medical, Sanitation and Jail Depts., H. E. H. the Nizam's Govt., 1923-24. *Address:* Ranchi, Chota Nagpur.

SINGH, GAYA PRASAD, B.A., B.L., M.L.A., Pleader, Muzaffarpur. *Educ.:* Muzaffarpur and Calcutta. Was a sub-deputy magistrate and collector for a few years but resigned subsequently; now practising as a pleader; was a member of the Muzzafarpur Municipal Board of the Sudder Hospital Committee; and of the Local Advisory Committee on Excise; an elected member of the Legislative Assembly since 1924. One of the founder members of the Aero Club of India and Burma; a member of the Governing Body of the Indian School of Mines, Dhanbad. *Publication:* "Pictorial Kashmir." *Address:* Mazaffarpur (Bihar)

SINGH, RAJA SURJ BAKSH, O.B.E. (1919), Taluqdar of Oudh. *b.* 15 Sept.1868. *m.* granddaughter of Raja Gangaram Shah of Khairigarh (Oudh). *Educ.:* at Sitapur and Lucknow. President, British Indian Assocn. of Taluqdars of Oudh. Member, first Leg. Assembly. *Publication:* "A Taluqdar of the Old School" by "Heliodorus" and "Arbitration. *Address:* Kamlapur P. O., Sitapur Dist. (U.P.).

SINGH, THE HON. SIRDAR SIR JOGENDRA, KT. (1929) Taluqdar, Aira Estate, Kheri District. Minister of Agriculture (1926) *b.* 25 May 1877. *m.* Winifred May O Donogholl. Contributes to several papers in India and England. Has been Home Minister, Patiala State. Fellow of the Punjab Univ.; Presdt. of Sikh, Educl: Confce., served on Indian Sugar Committee Indian Taxation Enquiry Commission and Skeen, Committee Member of Council of State Editor of *East and West*; *Publications:* "Kamla"; Nirjchan; Nasrin, Life of B. M. Malabari, *Address:* Aira Holme, Simla (East).

SINGH, KUNWAR MAHARAJ, M.A.(Oxford), Bar-at-Law. C.I.E. *b.* 17 May 1878, *m.* to Miss Maya Das, *d.* of the late Rai Bahadur Maya Das of Ferozpur (Punjab). *Educ.:* Harrow Ball. Coll., Oxford; Bar.-at-Law, Middle Temple, 1902. Ent. Prov., C.S.U.P. as Dy. Coll., 1904; Asst. Sec. to Govt. of India. Dept. of Education, 1911; Mag. and Collr, of Hamirpur, U. P., 1917; Scry, to U.P., Govt., 1919: Dy. Secretary, Govt. of India Education Dept., 1920-23. Dy. Commissioner, Bahraich 1923 Commissioner, Allahabad, 1927. Commission Benares, 1908. *Publications*; Annual Report on Co-operative Credit Societies in the U. P., 1908-1919; Reports on Indian Emigration to Mauritius and British Guiana and various contributions to the press. *Address:* The Manor, Simla.

SINGH, SIR RAMESHAR, G.C.I.E., K.B.E. D.Litt., Maharajadhiraja of Darbhanga; Mem., Exc. Council, Bihar and Orissa, (1912-1917) Mem. of Imp. Council, 1899-1900. *b.* 16 Jan. 1860, Twice married; two *s.* one *d.* *b.* Maharaja Bahadur Sir Lakshmeshwar Singh, G.C.I.E., made hereditary Maharaja Bahadur, 1907, hereditary Maharajadhiraja, 1920. *Educ.:* Queen's Coll., Benares and privately under the late Sir Chester Macnaghten, Principal, Rajkot College. privately; Life-Press., Behar Landholders Assoc., Maithel Mahasabha Bharat Dharma Mahamandal and also Pres., Hindu Univ. Soc., Behar Panchayat Assoc., etc. A member of the Indian Police Commission and of Indian Famine Trust; Pres., Prince of Wales Reception Committee for Bengal, 1905; Indian Industrial Conference, 1908. Religious Convention held at Calcutta, 1910, and Allahabad. 1911: All-India Hindu Conference, April 1915, All-India Landholders Assocn. and Bengal Landholders' Assocn. Member, Council of State, since 1920. *Address:* Darbhanga.

SINGH, THE HON. RAJA SIR RAMPAL, K.C.I.E., (1916); Member, Council of State; Taluqdar. *b.* 7 Aug. 1867. *m.* niece of Thakur Jagamohan Singh, late Taluqdar of Dhanawan Estate in Gonda Dist. *Educ.:* at Rae Bareilli High School and M.A.O. College, Aligarh. President-elect of the second U. P. Social Conference held in Lucknow in 1908 and of All-India Social Conference in 1910; presided over 5th All-India Hindu Conference at Delhi in 1918; elected President, British Indian Association of Oudh in 1921 and was re-elected in 1924. Was Fellow of Allahabad Univ. until 1909 and is Secretary of Kshattriya College, Lucknow; Member of the Executive Council of the Lucknow University and of the Court of the Hindu University of Benares; of the Board of Directors of Mahaluxmi Sugar Corporation, Lucknow, also Director of the Allahabad Bank Publications Pamphlets entitled "Taluqdars and the British Indian Association" (1917) and "Talukdars and the Amendment of Oudh Rent Law" (1921): and contributions to the press on social, political and religious topics. *Address:* Kurri Sudauli Raj, Dist. Rae Bareili, Oudh.

SINH, BEOHAR RAGHUBIR; Zamindar and Jagirdar. *Educ.* Government College, Jubbulpore. Hon. Magte., 2nd Class, sitting singly, has been member of the C.P. Council on behalf of Zamindars for two terms; has been elected Member Legislative Assembly on behalf of C.P. Zamindars Title Beohar recognised by Government—hereditary distinction. Khas Anm Darbari of H. E. the Governor, C. P. exempted from Arms Act. Is Chairman of the District Council and Member of Communication Board, C.P. *Publications:* Hindi Shastra Siddhanta Sar. *Address:* Jubbulpore.

SINHA, THE HON. MR. ANUGRAH NARAYAN, M.A.B.L., Zemindar, July 3, 1889. *Educ:* Patna and Calcutta. Joined the High Court, Patna, as Vakil; appeared in the famous "Burma Case" of the Dumraon Raj as junior to Mr. C. R. Das, Mr. Srinivasa Ayengar and the late Sir Ashutosh Mookherji, joined Non-Co-operation Movement 1921, at present Chairman of Gaya District Board and Member Council of State representing Bihar and Orissa; Chairman, Reception

Committee of the All-India Untouchable Conference held at Patna in 1926. *Publications*: Translated History of Ancient Magadh from Bengali into Hindi. *Address*: Villa Poiawan, P. O. Aurangabad, Dist. Gaya (Bihar and Orissa).

SINHA, BHUPENDRA NARAYANA, THE HON. RAJA BAHADUR (1918), B.A. (Calcutta); Minister, Government of Bengal, and Zemindar. *b.* 15th Nov. 1888. *m.* first Rani Prem Kumari and on demise Rani Surya Kumari. *Educ*: Presidency College, Calcutta. Member of the Dist. Board of Murshidabad for 12 years; 1st Class Hon. Magte; Vice-President, British Indian Association; Vice-President, All-India Cow Conference Association, Trustee of the Indian Museum; President of the India Art School; Elected to the Bengal Council in 1926; elected as a co-opted member of the Royal Statutory Commission; Member of the Finance Committee; Member of the Public Committee; Member of the Revenue Committee; Member of the E. B. Railway Local Advisory Committee and Minister to the Govt. of Bengal. *Address*: 54, Gariahat Road, Ballygunge, P.O., Calcutta; or Nashipur Rajpbati, Nashipur P.O., Dist., Murshidabad, Bengal.

SINHA, KUMAR GANGANAND, M.A. (1921); M.L.A., Hon. Research Scholar of the Calcutta University,(1922-23); Proprietor, Srinagar Raj. *b.* 24 Sept. 1898. *Educ.*: at Monghyr Zilla School (1907-10); Purnea Zilla School, Presidency College (Calcutta); Government Sanskrit Coll., Calcutta; and Post-Graduate Department, Calcutta University. Elected to the Royal Asiatic Society of Great Britain and Ireland in 1921; Asiatic Society of Bengal in 1922, Bihar and Orissa Research Society in 1924 and to the Fellowship of the Royal Society for the encouragement of arts, manufacture and commerce, etc., in 1923; a commissioner of the Purnea Municipality and a member of the Purnea District Board (1924-27; President of the Social and Religious Department of the Maithil Sammelana: one of the founders of the Nationalist Party in the Legislative Assembly. Joined the Swarajya Party in the Assembly. (1925). Elected a Secretary of the Congress Party in the Assembly 1928; a member of the Road Development Committee and its touring and drafting Sub-Committees 1927-28. President of the Purnea District Congress Committee. Since 1925: President of the Bihar Provincial Hindu Sabha; Member of the Executive Committee of the All-India Hindu Sabha. President of the Bihar Provincial Kavi Sammelana (1926). *Publications*: "The Place of Videha in the Ancient and the Mediæval India" (read in the second Oriental Conference): "A Note on the Jangala Desa"; and "Discovery of Bengali Dramas in Nepal" and "On some Maithili Dramas of the seventeenth and Eighteenth Centuries" (published in the Journal of the Asiatic Society of Bengal): "Is Dharmat religion Buddhism?" (read in the Third Oriental Conference, Madras, 1924) joint editor of the typical selections from Maithili proposed to be published by the Calcutta University, an Editor of the "Barhut Inscriptions" published by the Calcutta University in 1926 and author of several works under preparation. *Address*: "Srinagar Darbar," P. O. Srinagar, Dist. Purnea, (Bihar).

SINHA, THE HON. LALA SUKHBIR, Landlord, Jagirdar. and Banker *b.* 5 Jan. 1868. *Educ.* Agra College. Member, U. P. Legislative Council from 1909-1920; Member, Council of State from 1920-26 when re-elected to the same Council from the four Northern Divisions of the Agra Province; Hon. Secry., U.P. Zamindar's Association; President, Rishikul Asram and founder Ayurvedic College, Hardwar Member (1) Indian Central Cotton Committee (2) Board of Agriculture, U.P., (3) Member. Hardwar Improvement Committee; (4) Patron, Edward High School, Muzaffarnagar Director of the Muzaffarnagar Bank, Ltd., Ex-General Secretary, All-India Hindu Sabha and Ex-Honorary Secretary, Meerut College; Member, U.P. Cattle Breeding Committee. *Publications*: Translation of the "Gita" and Yoga Patanjali" in Hindi. *Address*: "Anandbhuwan," Muzaffarnagar, U. P.

SINHA, NARENDRA PRASANNA, Major, I.M.S., retired; Consulting Physician; Mem., Advisory Council, India Office. *b.* 30 Sept. 1858. *Educ.*: Calcutta; Univ. Coll., London. Ent. I.M.S., 1886; retired 1905.

SINHA, SACHCHINDANANDA, Barrister, First Indian Finance Member, Ex-Member, Executive Council, Bihar and Orissa Government, 1921-1926 also President of Legislative Council 1921-22. *b.* 10 Nov. 1871, *m.* the late Srimati Radhika, *d.* of the late Mr. Sewa Ram, of Lahore. *Educ.*: Patna College. and City College, Calcutta. Called to the Bar (Middle Temple), 1893; Avdvocate, Calcutta High Court, 1893; Allahabad High Court, 1896; Patna High Court, 1916. Founded and edited *The Hindustan Review*, 1899-1921; Twice Elected Member Imperial Legislative Council, Elected Legislative Assembly, 1920, also elected its first Deputy President, Feb. 1921. Established and endowed in 1924 the Srimati Radhika Institute in memory of his wife, which building contains, besides the largest public hall in Patna, the Sachchidananda Sinha Library, a splendid collection of classical and current works in English. Visited England in 1927 where he in writings and speeches made notable contributions to the discussion of Indian Reforms as embodied in the system known as Dyarchy. *Publication*: "The Partition of Bengal or the Separation of Behar." *Address*: Patna, Behar.

SIRMOOR, LIEUT.-COL. H. H. MAHARAJA SIR AMAR PRAKASH BAHADUR, K.C.S.I., K.C.I.E. *b.* 26 Jan. 1888. *m. d.* of the late His Excellency Maharaja Deb Shamsher Jung, Rana Bahadur ex-Prime Minister of Nepal in 1910. *Educ.*: under European and Indian Private tutors. *Address*: Sirmoor, Nahan.

SIROHI, H. H. MAHARAJADHIRAJ, MAHARAO SIR SARUP RAM SINGH BAHADUR. K.C.S.I. *b.* Sept. 27, 1888. *s.* to the gadi, April 29, 1920. *Address*: Sirohi, Rajputana.

SITAMAU, H. H. SIR RAJA RAM SINGH, RAJA OF, K.C.I.E. *b.* 1880; descended from Rathor House of Kachi Baroda. *m.* thrice. *Educ.:* Daly Coll., Indore, Hindi and Sanskrit poet, and keen student of science and ancient and modern philosophy, is entitled to a salute of 11 guns. *S.* by selection by Govt. of India in default of direct issue, 1900. *Address:* Ramnivas Palace, Sitamau, C. I.

SIVAGNANAM PILLAI, DEWAN BAHADUR SIR TINNEVELLY NELLAIPPA, B.A., *b* 1st. April; 1861. *Educ.:* Madras Christian College. Service under Government; Retired as Dy. Collector; President, Dist. Board, Tinnevelly, 1920-1923. Minister of Development, Madras. 1923-26 *Address:* 77, North Car Street, Tinnevelly.

SIVASWAMI AYYAR, SIR P. S., K.C.S.I., 1915; C.S.I. (1912); C.I.E. (1908). Retd. Member, Executive Council, Madras. *b.* 7 Feb. 1864. *Educ.* S. P. G. College, Tanjore; Government College, Kumbakonam; Presidency College, Madras; High Court Vakil, 1885; Asstt. Professor, Law College, Madras, 1893-99; Joint Editor, Madras Law Journal, 1893-1907; first Indian Representative of the University of Madras in the Madras Legislative Council, 1904-07: Advocate-General, 1907; Member of Executive Council, Madras, 1912-17; Vice-Chancellor, University of Madras, 1916-18; Vice-Chancellor of Benares Hindu University, 1918-19, Elected to the Indian Legislative Assembly by the districts of Tanjore and Trichinopoly, 1920; President of the second and ninth Sessions of the National Liberal Federation at Calcutta, 1919; and Akola, 1926. Member of the Indian Delegation at the Third Session of the Assembly of the League of Nations at Geneva, 1922; Nominated Member of the Indian Legislative Assembly, 1924. *Publication:* Indian Constitutional Problems (1928). *Address:* Sudharma Edward Elliot Road, Mylapore Madras.

SKEEN, LIEUT.-GENERAL SIR ANDREW, K.C.B (1925), K.C.I.E. (1920), C.M.G. (1916). Chief of the General Staff, India. *b.* 20 Jan. 1873. *Address:* Army Headquarters Delhi and Simla.

SMITH, SIR HENRY MONCRIEFF, KT. (1923) C.I.E. (1920), President. Council of State (Dec. 1924). *b.* Dec. 23, 1873. *Educ.:* Blundell's School, Tiverton; Sidney Sussex Coll., Cambridge. I.C.S., 1897. Assist. Commr. in U. P. Dist. and Sessions Judge, 1908; Addl. Sec. to U. P. Govt., 1914; Dy. Sec. to Govt. of India, 1915; Joint Sec., 1919. Secretary, Council of State, 1921-23; Sec. to Govt. of India, Leg. Dept.. and Secretary, Leg. Assembly 1921-24 Chairman Indian Red Cross Society and St. John Ambulance Association (Indian Council) since 1924. Knight of Grace of St. John of Jerusalem; President, All-India Lawn Tennis Association. *Address:* Simla or Delhi.

SMITH, SYDNEY DAVID, B.A., C.I.E., Deputy Commissioner of Excise, Bombay Presidency. *b.* 11 Nov. 1873. *m.* to Agnes Mary Bamfylde Ellis nee Hartley, *d.* of Joseph Hartley of Leeds. *Educ:* Deccan College, Poona and Government Law College, Poona. Joined the Salt Department in 1895 as Superintendent Pritchard Salt Works, Thereafter was selected to be Customs Manager of the Kathiawar Customs Line when first opened in 1903; posted to Khandesh as Assistant Collector of Excise 1904-1907; First Grade Asstt. Coll. of Excise 1904-1916; on deputation to Madras Presidency in connection with Excise Reorganisation 1916; Dy. Commissioner of Salt and Excise, Central Division 1918-24 Dy. Commissioner of Excise, Bombay Presidency 1st April 1924 to date; attended the conference of Excise Ministers at Simla as a representative of the Bombay Government in September 1926. *Address:* The Dell, Nepean Road, Malabar Hill.

SMITH, SIR THOMAS, KT. (1921), V. D. (1914), Chevalier of the Order of the Crown (Belgium) (1919), Managing Director, Muir Mills Co., Ltd., Cawnpore. *b.* 28 Aug. 1875. *m.* Elsie Maud. *d.* of Sir Henry Ledgard in 1907; 2 *s.* 1 *d.* Member of the Hunter Committee on Punjab disorders, 1919. Presdt., Upper India Chamber of Commerce, 1918-1921; Member, U. P. Leg. Council, 1918-26; Fellow of Allahabad University, 1913-22; Commandant, 16th Cawnpore Rifles, 1913-22. Representative of Employers in India at International Labour Conference, Geneva, 1925. *Address:* Westfield, Cawnpore., and Merlewood, Virginia Water, Surrey.

SOAMES, GEOFFREY EWART, B.A., (OXFORD), C.I.E., (1927), I.C.S., Chief Secretary to the Government of Assam. *b.* 11 Jan. 1881. *m.* Una Sweet (1915). *Educ:* Eastbourne College and Merton College, Oxford. Entered Indian Civil Service, began service in 1905 in the Province of Eastern Bengal and Assam, assigned to the Province of Assam after the reconstitution of the Provinces. *Address:* Shillong, Assam.

SOLA, THE REV. MARCIAL, S. J., PH. D., M.A., Former Principal of the Ateneo de Manila Institution from 1916-1920. Professor of Logic and Philosophy at St. Xavier's College, Bombay. *b.* Nov. 7, 1872 in the province of Barcelona, North of Spain. Ordained at St. Louis, Mo. U. S. A. in 1906. *Educ.*; Vich, Spain and at St. Louis University, Mo. U. S. A. Went to the Philippines. On the staff of the Manila Observatory under the Spanish and the American Governments from 1897 to 1903. A Delegate to the World's Fair held in St. Louis, U. S. A., in 1904. Prof. for several years at the Ateneo de Manila, Philippines, and Principal of that Institution from 1916 to 1920. On the Staff of St. Xavier's College, Bombay, since 1922. *Publications*: Author of "The Meteorological Service of the Philippine Islands." "A Study of Seismic Waves". Contributor to the monthly review "Razon y Fe" edited at Madrid. Author of "A Compendium of the Science of Logic." *Address:* St. Xavier's College, Cruickshank Road, Fort, Bombay.

SOLOMON, CAPT. WILLIAM EWART GLADSTONE, Kaisar-I-Hind Medal (First Class); Associate, Royal British Colonial Society of Artists. Principal, Sir J. J. School of Art, Bombay; Curator, Art Section, Prince of Wales Museum, Bombay. *Educ.:* Bedford Grammar School, University School, Hastings and abroad. Studied under Sir Arthur Cope, K. A., J. Watson Nicol, and at the Royal Academy schools, London. Took the highest prizes and medals for figure painting and Decorative painting. Took the Gold Medal and Travelling Scholarship for Historical Painting. Exhibited many pictures, and portraits at Royal Academy; appointed Principal Sir J. J. School of Art, Bombay, 1919; founded the class of Mural Painting under H. E. Lord Llyod's direction, 1920; served in Gallipoli, Mesopotamia and India, 1914-1919. *Publications:* "The Charm of Indian Art," "The Bombay Revival of Indian Art," "The Women of the Ajanta Caves," etc. *Address:* School of Art Bungalow, Bombay.

SORABJI, CORNELIA: Kaisar-i-Hind Gold 1st class medal (1909). Bar 1st Class (1921), Legal Adviser to Purdahnishins, Court of Wards, Bengal, Behar and Orissa, and Assam, and Consulting Counsel from 1904-to 1922 *Educ.:* Somerville Coll., Oxford, Lee and Pembertons, Lincoln's Inn Fields, London; Bachelor of Civil Law Examination, Oxford 1892; Bar-at-Law, Lincoln's Inn, 1923. *Publications:—Sun Babies* (1904): *Between the Twilights* (1908); The *Purdanshin* (1916): Sun-Babies (2nd Series Illustrated) 1920; "Therefore" (1924) contributions to the *Nineteenth Century, Westminister Gazette, The Times* and other newspapers and Magazines. *Address:* "Bar Library, Calcutta."

SPENCE, SIR REGINALD ARTHUR, KT., Managing Director, Phipson & Co., Ltd. *b.* March 1, 1880. *Educ:* Christ's Hospital. Arrived in India Feb. 1901: formerly Lieut., Bombay Light Horse; Hon. Secretary, Bombay Natural History Society and Pechey Phipson Sanitarium, Nasik; Hon. Treasurer, Bombay Education Society; Vice-Presdt., Bombay B. P. Boy Scouts Association; Dy. Dist. Grand Master Masons. E. C., Bombay and Dist. Grand Mark Master, E. C., Bombay; was member Indian Legislative Assembly, 1921-1923; Editor, Journal of Bombay Natural History Society. *Address:* Byculla Club, Bombay.

SRINIVASA, IYENGAR S. *b.* 11 Sept. 1894. *Educ.* Madura and Presidency College, Madras. Vakil (1898); Member of Madras Senate, 1912-16; President, Vakils' Association of Madras; President, Madras Social Reform Association, 1916-20; Fellow of the Madras University; Member, All-India Congress Committee; Member, Indian Legislative Assembly; Advocate-General, Madras, 1916-20; President, Indian National Congress, 1926-27. *Publication:* A book on law reform (1909). *Address:* Mylapore, Madras.

SRINIVASA RAO, RAI BAHADUR PATRI VENKATA, B.A., B.L., High Court Vakil, Guntur, and Member, Legis. Assembly. *b.* 1877, *m.* to *d.* of Rao Bahadur Baru Ramanarsa Pantulu Garu. *Educ.:* Town High School and Noble College, Masulipatam, and Christian Coll. and Law Coll., Madras. Joined Cocanada Bar, 1903, and Guntur Bar in 1906. Vice-President, Guntur Dist. Board, for 6 years; was Municipal Councillor for some years; was member, Kistna Flood Committee; Secretary of the First Dt. Congress Committee. *Address:* Guntur.

STANDLEY, ALFRED WILLIAM EVANS, Associate of Coopers Hill College, Member of Council of the Institution of Engineers (India); Chief Engineer and Secretary, P. W. D., Bikaner State. *b.* 20 Nov. 1866. *m.* Una. *d.* of H. F. D. Bunington, I.C.S. (retd). *Educ.:* Royal College of Mauritius and then at Royal Indian Engineering Coll., Coopers Hill. Joined P. W. D. in U.P., Irrigation Branch, as Asstt. Engineer in 1891; Construction of Gangao Dam, Upper E. J. Canal in 1895; services lent to Benares Municipality in 1896 as Resident Engineer for construction of drainage and sewerage and water-works. Promoted Ex. Engineer in 1899; services lent to Bikaner State, 1903-06, during which several irrigation schemes, water works and central electric power station were designed and constructed; also originated the investigation of the feasibility of irrigating the North tracts of the State from the Sutlej river which has eventually led to Bikaner getting a share of the water in the Sutlej Valley Project now under construction; Sanitary Engr. to Govt., U.P. in 1908 and 1909. Promoted to Superintending Engineer, 1912, and then Chief Engineer and Secretary to Government, P.W.D., Irrigation Branch, U. P. in 1918 and retired in 1921. *Publications:* Papers on "Subsoil Percolation" and "Flood Absorption of Reservoirs" in the Journal of the Institution of Engineers (India), Vol. II. *Address:* Bikaner, Rajputana.

STEIN, SIR AUREL, K.C.I.E., Ph.D., D. Litt. (Hon. Oxon.), D. Sc. (Hon. Camb.), D. O.L. (Hon. Punjab); Fellow, Brit. Acad., Correspondant de l' Institut de France, Gold Medallist, R. Geogr. Soc. etc.; Indian Archæological Survey, Officer on special duty. *b.* Budapest, 26 Nov. 1862. *Educ.:* Budapest and Dresden; studied Oriental Languages and Antiquities at Vienna and Tubingen Universities and in England, 1888-99. Principal, Oriental College and Registrar, Punjab University; app. to I. E. S. as Princ. of Calcutta Madraseh, 1899. Inspector-General of Education, N. W. P. and Baluchistan, 1904. Carried out archæological explorations for Indian Govt., in Chinese Turkestan, 1900-1, and in C. Asia and W. China, 1906-08; transferred to Archæological Survey, 1909; carried out geographical and archæological explorations in C. Asia and Persia. 1913-16.; on N. W. Frontier and in, Baluchistan, Kharan and Kalat, 1926-28. *Publications:* Kalhana's *Chronicle of the Kings of Kashmir;* Sanskrit text, 1822; trans., with commentary, 2 vols., 1900; *Sand-buried Ruins of Khotan*, 1903-1921 *Ancient Khotan*, 1908 (2 vos.); *Ruins of Desert Cathay*, 1912 (2 vols.); *Serindia*, 1921 (5 vols.); *The Thousand Buddhas; Memoir on Maps of Chinese Turkistan and Kansu* (2 vols.); Innermost Asia, 1928 (4 vols.); and numerous papers on Indian and Central Asian Archæology and Geography. *Address:* Srinagar; E. I. United Service Club, London.

STILL, CHARLES, C.I.E.; Indigo Planter. *b.* 1849. *Educ.:* privately. *Address:* Sathi Factory, Chumparun.

STOKES, HOPETOUN GABRIEL, C.I.E., B.A. *m.* Alice Henrietta, *d.* of the late Sir Henry Lawrence, Bart., Decr. 1922. 1st Member Madras Board of Revenue, 1925; Dy. Sec., Govt. of India, Home Dept., 1908-11; Fin. Dept., 1911-13; Fin. Mem., Imp. Delhi Committee, 1913-15; Priv. Sec. to Govr. of Madras, 1915.; Pol. Ag., Banganapally, Madras; Secry. to Madras Govt., Local and Municipal Dept., 1918-19; Administrative Adviser, Klagenfurt Plebiscite Commission, 1920; Member, Board of Revenue, Madras. 1921; Secry. to Madras Govt., Development Dept. 1922; 3rd Member, Board of Revenue, Madras, 1924. *Educ.:* Clifton; Oriel Coll., Oxford, Ent. I.C.S., 1896. *Address:* c/o Binny & Co., Madras.

STONEY, EDWARD WALLER, C.I.E., M.E. M.I.C.E.; M.Inst.C.E.; late Ch. Eng. of Madras Ry. (retired), 1904; 4th *s.* of late T. G. Stoney, J.P., of Kyle Park and Arranhill, Co. Tipperary, Ireland; *m.* 1875; Scholar, Gold Medallist and M. E., Queen's University, Ireland; Fellow, Madras University. *Publications*: various engineering papers. *Address:* The Gables, Coonoor.

STRONG, THE HON. LT.-COL. HENRY STUART, C.I.E. (1929); Ag. Agent to the Governor-General in Western India States. Appointed Asst. Political Agent and Assistant Resident at Aden in 1902. Two years later he was appointed Political Agent, Mahi Kantha Agency and then Assistant to the Resident at Baroda in 1906; Assistant Resident, 1907; Assistant Political Agent, Palanpur, 1908, and Kathiawar 1909; Administrator Palitana State, 1912; Assistant Resident at Aden 1916; Political Agent, Kathiawar, 1920; Political Agent, Banas Kantha Agency, 1925; Resident, Western Rajputana States 1926. *Address:* Rajkot.

STUART, THE HON. SIR LOUIS, C.I.E., I.C.S., Chief Judge, Chief Court of Oudh since 1925. *b.* 12 March 1870. *Educ.:* Chaterhouse; Balliol Coll., Oxford. Ent. I.C.S., 1891, Jud. Sec. to Govt. and nom. as Mem. of U. P. Council, 1910-12. Addl. Judl. Commissioner, Oudh, 1912; Judicial Commissioner, Oudh, 1921; Puisne Judge, High Court, Allahabad, 1922. *Address*: Lucknow.

STUART-WILLIAMS, SYDNEY CHARLES, M.A. (Cantab); B.A. (London). Chairman, Calcutta Port Commissioners. *b.* 9 May 1876; *m.* Feb. 1903, Elizabeth Mary Stuart; 3 sons, *Educ.:* Kingswood Sch., Bath; Univ. Coll., Aberystwyth and Trinity College, Cambridge, Junior Sec. to Agent, E. I. Ry., 1900-03; Dy. Sec. to Agent, E. I. R., 1903-06; Secy. to Agent, E. I. R., 1906-14; Sec., Port Commissioners, Calcutta, 1914-16; Vice-Chairman, 1916. Dy. Chairman, 1921; Chairman, since Novr. 1922. *Publications:* The Economics of Railway Transport, 1909; Article on Indian railways in Modern Railway Practice, 1913. History of the Port of Calcutta, 1870-1920. *Address:* Port Commissioners' House, Calcutta.

SUBBARAYAN, DR. PARAMASIVA, M.A., B.C.L. (OXON.), LL.D. (DUBLIN), Zemindar of Kumaramangalam, Chief Minister to the Govt. of Madras. *b.* 9 Septr. 1889. *m.* Radhabai Kudmal. *d.* of Rai Sahib K. Rangarao of Mangalore. *Educ:* Newington School, Madras, the Presidency and Madras Christian Colleges and Wadham College, Oxford. Was Council Secretary for a few months in the first reformed Legislative Council; has been a member of Madras Legislative Council representing South Central Landholders from 1920. Was a member of All-India Congress Committee, in 1920. *Address:* "Fairlawns," Egmore, Madras.

SUBEDAR, MANU, B.A. (Bombay), Dakshina Fellow of the Elphnstone College, B.Sc. (Eco.) London, First Class honours in Public Finance, Banking and Currency, Barrister-at-Law, Gray's Inn, 1912. Director, Peninsular Locomotive Co., Ltd.; Managing Director, Acme-Bala Trading Co., Ltd. *Educ.*: New High School, Bombay, First in Matric from the School, Elphinstone College, Bombay; James Taylor Scholar & Prizeman, London School of Economics, London University, South Kensington Gray's Inn. Returned to India in 1914. Lecturer in Economics, Bombay University. Professor of Economics, Calcutta University. Examiner in M.A., Bombay and Calcutta. Secretary, Sholapur Spinning and Weaving Mills Co., Ltd., (1917); Secretary, Morarji Goculdas Spinning and Weaving Mills Co., Ltd.,; Managing Director, Western India Small Industries Corporation Ltd. (1919); Partner, Lalji Naranji & Co., Managing Agents of Jupiter General Insurance Co., Ltd.; Representative of the Indian Merchants' Chamber on the Bombay Port Trust; sent to England by the Government of India to give evidence on behalf of the Indian Commercial Community before the Babington-Smith Committee; Managing Agent of the Pioneer Rubber Co. (1920); Director of the Peninsular Locomotive Co., Ltd. (1924); Managing Director, Acme-Bala Trading Co., Ltd., (1925); Representative of the Indian Merchants' Chamber on the Advisory Board of the Development Department. Wrote separate dissenting report on Back Bay Reclamation Scheme and also on Housing Scheme. *Address*: Kodak House, Hornby Road, Fort, Bombay.

SUBRAHMANYAM, RAO BAHADUR CALAGA SUNDARAYYA, B.A., B.L., Landowner. *b.* Nov. 1862. *Educ:* Kumbakonam and Madras Presidency Colleges. *m.* Balambamma, *d.* of C. Munakshaiya, Bar-at-Law and Judge in Mysore Practised as Vakil at Bellary; Chairman, Bellary Municipality, 1904-10; Vice-President District Board, Bellary, 1911-1918: Member, Liberal League, Madras; has taken interest in co-operative work and social and political movements; elected to the Legislative Assembly, 1920. Apptd. President of Bench of Hon. Magistrates Mayavaram Town in 1923. *Publications:* Pamphlets on Bubonic Plague and Irrigation Problems of the Ceded Districts. *Address:* Mayavaram, S. India.

SUHRAWARDY, THE HON. MR. JUSTICE ZAHHADUR RAHIM ZAHID, M.A., B.L., KT.

Bar-at-Law, Judge, Calcutta High Court. *b.* 1870. *Educ:* Dacca and Calcutta. *Address*: 3, Wellesley 1st Lane, Calcutta.

SUKHDEO PRASAD, SIR, B.A., Rao Bahadur (1895); Gold Kaisar-i-Hind Medal (1901); C.I.E., 1902; Kt. Bachelor (1922). Political Judicial and Finance Member, State Council, 1924-26, *b.* March 1862. *m.* Mohanji, *d.* of Prannath Hukkoo. *Educ.*: at Agra College. Settlement, Ambala, 1885; Judicial Secretary, Marwar, 1886; Member of Council, 1887; Senior Member, 1901, Minister, 1908: Udaipur Minister, 1914-18; Political and Judicial Member Regency Council, 1922-23. Officiated as its Vice-President, 1920. is Sardar of first rank with judicial powers. Holds 3 villages in jagir of an annual rental of Rs. 25,000. *Publications:* Famine Report, 1899-1900; Origin of the Rathores; Agricultural Indebtedness. *Address:* Sukh Ashram, Jodhpur, Rajputana.

SUKTHANKAR, VISHNU SITARAM, M.A., (Cantab), Ph. D. (Berlin) Research Scholar and Lecturer in the Post-graduate Department of the Bombay University. *b.* 4 May 1887. *m.* Eleanora nee Bowing (died 6th Aug. 1926). *Educ:* Maratha High School and St. Xavier's College, Bombay, St. John's College, Cambridge (Engl). and Berlin University. Formerly Asstt. Superintendent, Archæological Survey, Western Circle; Lecturer in the Post-graduate Department of the Bombay University; Director of the Mahabharata Department of Bhandarkar Oriental Reseach Institute, Poona; and Editor of *The Mahabharata Publications:* Die Grammatik Sakatayanas, Leipzig, 1921; Vasavadatta, Oxford Univ. Press, 1923; First Critical Edition of the Mahabharata, 1927; Editor-in-Chief, Journal of the Bombay Branch, Royal Asiatic Society. *Address:* Shantaram House, Malabar Hill, Bombay; and Bhandarkar Oriental Research Institute, Poona.

SULTAN AHMAD KHAN, SIRDAR SAHIBZADA. MUNTAZIM-UD-DAULA, C.I.E. (1924), M.A., LL.M. (Cantab), Barrister-at-Law, son of Imtiaz-Ud-daula Nawab Ghulam Ahmad Khan Bahadur Ahmadi; Appeal Member since 1918. *b.* 1869. *m.* 1912, Lucy Pelling Hall, of Bristol. *Educ.*: at the Aligarh Mahomedan Anglo-Oriental College and Christ's College, Cambridge (called to the Bar at the Inner Temple, London, April 1894; B.A., LL.B. June 1894, M.A. and LL.M., 1909); was Chief Justice, Gwalior State, 1905-9, Law Member of Council, 1909-12, Finance Member, 1912-16, and Army Member, 1917; a Member of the Hunter Committee to inquire into causes of Disturbances in Delhi, Punjab, and Bombay, 1919-20. *Address:* Gwalior, India.

SURAJ SINGH, CAPTAIN, BAHADUR, O.B.I., I.O-M. Marshal of the Legislative Assembly. *b.* 10 Feb. 1878. *m.* Ratankour. *Educ.:* under private tutors. Entered army in 1893 as a private soldier; served in Somaliland 1903-04; mentioned for good service; Viceroy's Commission 1907; served as Indian Staff Officer of the Cavalry School, Saugor, 1910-14 and 1919-21; served on the staff of General M. F. Remington, Commander of the Indian Cavalry Corps in France 1914-16, France to 1918, Egypt and Palestine to 1919; Afghan War 1919; retired on amalgamation of the Forces in 1921; granted hon. rank of Captain 1923; apptd. Marshal of Indian Legislative Assembly 1921. *Publications*: Khialat Marcus Aurelius (Thoughts of Marcus Aurelius in Urdu); Guide to Physical Training for Youths; Other Military books in 1901, 1907, 1910 and 1911. *Address:* Kucha Khai, Katra Karam Singh, Amritsar.

SUTHERLAND, LIEUT.-COL. DAVID WATERS, C.I.E., I.M.S. (Retired), late Prof. of Medicine, Med. Coll., Lahore. *b.* Australia, 18 Dec. 1871. *m.* 1915, Princess Bamba Duleep Singh, *d.* of late Maharaja Duleep Singh. *Educ.:* Melbourne and Edinburgh Univ. M.D. (Edin.), M.B. C.M. (Edin.), F.R.C.P. (Lond.), F.R.S. (Edin.) Fell. Roy. Soc., Med., London. *Address:* 28, Jail Road, Lahore.

SWAIN, WALTER, C.I.E. (1922), M.L.C., Inspector-General of Police, Behar, 1923. *b.* Jan. 17, 1876. *m.* Annie Matilde, sec. *d.* of Chas. Fox, Esq., of Carse-of-Gowrie, Scotland. *Educ.:* Boston, Grammar School. Assistant Superintendent of Police, 1895; Supdt. of Police, 1906; Dy. Inspector-General of Police, 1919; Offg. Inspr.-Genl. of Police, 1920: Delhi Durbar Medal, 1912; Volunteer Long Service Medal, 1919, King's Police Medal, 1918. *Publications:* "Instructions for Constables" (1901) in English, Kaithi and Bengali; "Advice on the Construction of Police Buildings" (1921). *Address:* The Imperial Bank of India, Patna, E.I.R. and P. O. Kitale, Trans: Nzoia, Kenya Colony.

SYED ABUL AAS, Zamindar *b.* 27th Septr. 1880. *m.* Bibi Noor-i-Ayesha. *Educ.:* Govt. City School, Patna; studied privately English, Arabic, Persian and Urdu: has always taken keen interest in matters educational. Apptd. Hon. Magte. at Patna 1906, served 20 years as Hon. Magte., 1906-26; elected member, Patna Municipal Board 1906 and 1909; elected member, Asiatic Society of Bengal, 1903; elected member of Bihar and Orissa Research Society Nov. 1916; member of Council of All-India Muslim League; Hon. Asstt. Secry., Bihar and Orissa Provincial Muslim League; Apptd. Member of the proposed London Mosque Committee, 1911; apptd. Member of the first Universal Races Congress held at Univ. of London, 1911; joined Muslim Deputation which waited upon Lord Hardinge in 1914; elected Member of Aligarh Muslim Assocn., 1914; elected Vice-Presidents of Bihari Students' Association and Anjumani-Islamia, Patna, 1914: served 2 years as Director, Bihar and Orissa Provincial Co-operative Bank, Patna, 1917-18; nominated non-official member, Mental Hospital, Patna, 1923. *Address:* Abulaas Lane, Bankipur, Patna.

SYED MOHAMMED FAKHRUDDIN, The HON. KHAN BAHADUR, SIR, KT. (1924), B.A., B.L., Minister of Education, Bihar and Orissa since 1921. *b.* 1870. *m.* Musammut Kaniz Banoo of Shaikhpura. *Educ:* at Patna. Practised as a vakil in the Mofussil courts and then in the Patna High Court, was the first Government Pleader in the Patna High Court; Member, Legislative Council, Bengal, in the first reformed Council under Morley-

Minto Reforms Scheme; served three terms in the Bihar and Orissa Legislative Council, was for a long time Secretary of the Bihar Provincial Moslem League. *Address:* Moradpore, Patna.

SYED, SIR ALI IMAM, K.C.S.I. (1914), C.S.I. (1911). *b.* Neora (Patna), 11 Feb. 1869: *s.* of Nawab Syed Imdad Imam, Shamsululama; *m.* 1891; five *s.* four *d.* Called to Bar, Middle Temple, 1890; Standing Council, Calcutta High Court; President, 1st Session of the All-India Moslem League held at Amritsar, 1908; Mem., Moslem League Depn. to England, 1909; Member of Governor's Legislative Council, Bengal, 1910; Fellow of Calcutta University, 1908-12; Law Member of Governor-General's Council, 1910-16; Puisne Judge of Patna High Court, 1917; Member, Executive Council of Bihar and Orissa, 1918; President, Executive Council of the Government of the Nizam of Hyderabad, 1919; First Indian Representative to sit at the first meeting of the League of Nations, Nov. 1920. *Address:* Mariam Munzil, Patna; also Bella Vista, Hyderabad (Deccan).

SYED, SIRDAR ALI KHAN, created Nawab Sirdar Nawaz Jung Bahadur, 1921; Postmaster General of H. E. H. the Nizam's Dominions since 1922—1929. *b.* 26th March 1879; eldest surviving *s.* of late Nawab Sirdar Diler Jung, Sirdar Diler-ud-Dowla, Sirdar Diler-ul-Mulk Bahadur, C.I.E., some time Home Secretary at Hyderabad. *m.* 1896; five *s.* Two *d.* Educ.: privately. Entered the Nizam's service, 1911; has held several responsible positions, including the Commissionership of Gulburga Province; presented Georgian and Queen Mary Historical Furniture to the National Collection at Victoria Memorial Hall, Calcutta, 1908. *Publications*: Lord Curzon's Administration of India, 1905; Unrest in India, 1907; Historical Furniture, 1908; India of To-day, 1908; Life of Lord Morely, 1923; The Earl of Reading 1924; British India, 1926; contributions to the English and Indian Press with regard to the Indian political situation. *Address:* Hyderabad, Deccan.

SYED RAZA ALI, C.B.E. Member, Public Service Commission (1926); B.A., LL.B, (Allahabad Univ.) *b.* 29 April 1882. *m. d.* of his mother's first cousin. *Educ.:* Government High School, Moradabad and Mahomedan College, Aligarh. Started practice at Moradabad in 1908 and was a radical in politics; returned to U.P. Legis. Council 1912; took prominent part in Cawnpore Mosque agitation; elected Trustee of Aligarh College; gave evidence before Islington Commission and Southborough Committee; returned unopposed to U.P. Council in 1916 and 1920; was one of those responsible for introducing separate Moslem representation in Municipal Boards in U.P.; took active part in negotiating the Congress League Compact in 1916; same year settled at Allahabad; identified himself with Swaraj and Khilafat movements but strongly differing from non-co-operation programme; became independent in politics 1920, member of Council of State 1921-1926, elected member of Delhi University Court; was member of North West Inquiry Committee and signed majority report; headed two deputations of Moslem members of Indian Legislature to Viceroy in 1922 and 1923 in connection with Turkish question; gave non-party evidence before Reforms Inquiry Committee in 1924; President, All-India Moslem League, Bombay Session, Decr. 1924. Member, Govt. of India's Deputation to South Africa (1925-26). *Publications:* Essays on Moslem Questions (1912). *Address:* Delhi and Simla.

SYKES, MAJOR-GENERAL SIR FREDERICK, G.C.I.E., G.B.E., K.C.B., C.M.G., Governor of Bombay. *b.* 23 July 1877, son of Henry Sykes, Addiscombe. *m.* 1920, Isabel, *d.* of late Rt. Hon. A. Bonar Law, one *s.* 15th (The King's) Hussars; 2nd Lt. 1901; Lt. 1903; Capt. 1908; Bt. Major, 1913; Bt. Lt. Col. 1915; Bt. Col. 1918; Major-General, 1918; employed with West African Regt. 1903-4; Intelligence Branch, India, 1905-6; passed Staff College, 1908-9; G.S.O., War Office, 1911-12; Commander, Royal Flying Corps, Military Wing, 1912, which he raised and commanded till 1914; sometime commanding R.F.C. France 1914-15; temp. Colonel (2nd Commander) Royal Marines and Wing Captain R.F.C. (Naval Wing whilst commanding Royal Naval Air Service in E. Mediterranean, 1915-16; A.A. and Q.M.G. 1916; A.A.G. War Office, 1916; Brig. General and Deputy Director, War Office, 1917; Brigadier General, General Staff, Supreme War Council, Versailles, 1917-18; Major Gen. and Chief of the Air Staff, 1918-19; Controller General of Civil Aviation, Feb. 1919-22; served Imperial Yeomanry and Commander-in-Chief's Bodyguard in S. African War, 1900-01 (severely wounded, Queen's medal with clasps), European War, 1914-18 (despatches five times, Bt. Lt.-Col. Bt. Col., C.M.G., K.C.B.); Member of Imperial War Cabinet; Chief of Air Section, British Delegation at Peace Conference, 1919; Croix de Commander de la Legion d'Honneur; Croix de Commander de l'Ordre de Leopold, Belgium; Vladimir of Russia; Distinguished Service Medal (U.S.A.); Order of the Rising Sun, Japan; Member of Council of the Royal Aeronautical and Royal Geographical Societies; Lees-Knowles Lecturer at Cambridge University, 1921; Director of Underground Electric, London General Omnibus, Anglo-Argentine Tramways, Marconi Wireless Telegraph, and other Companies. Chairman of the Government Broadcasting Board, 1923-28; Chairman, Vice-Chairman or member of four other Government Committees; *Publication:* Aviation in Peace and War, 1922. *Address:* Government House, Malabar Point, Bombay.

TAGORE, ABANINDRA NATH, C.I.E.; Vice Zemindar of Shazädpur, Bengal; *b.* 1871 *Educ.:* Sanskrit Coll., Calcutta, and at home Designed Memorial Address to Lady Curzon Casket presented to King by Corp. of Calcutta 1911; principal work consists in reviving School of Indian Art. *Address:* 5 Dwarkanath Tagore's Lane, Calcutta.

TAGORE, MAHARAJA BAHADUR SIR PRODYOT COOMAR, KT. *b.* 17 September 1873, *Educ.:* Hindu Sch., Calcutta; afterwards privately: Sheriff of Calcutta, 1909; Trustee,

Victoria Mem. Hall; Trustee, Indian Museum: Fellow, Royal Photographic Society of Great Britain. Mem. of Asiatic Soc. of Bengal; formerly Mem. Bengal Council. *Address:* Tagore Castle, Calcutta.

TAGORE, SIR RABINDRANATH, KT., D.Lit (Calcutta Univ.); *b.* 1861. *Educ.:* privately. Lived at Calcutta first; went to country at age of 24 to take charge of his father's estates; there he wrote many of his works; at age of 40 founded school at Shantiniketan, Bolpur, in 1921. this has been his lifework ever since; visited England 1912, and translated some of his Bengali works into English; Nobel Prize for Literature, 1913. *Publications:* In Bengali about 30 political works, dramas, operas about 30; Story books, Novels 16; Essays about 40; Song books 25. In English—Gitanjali, 1912. The Gardener, 1913. The Crescent Moon, 1913. Chitra, 1913. The King of the Dark Chamber, 1914. Post Office, 1914. Sadhana, 1914. Kabir's Poems, 1915. Fruit-Gathering, 1916. Hungry Stones and other Stories, 1916. Stray Birds, 1916. My Reminiscences, 1917. Sacrifice and other Plays, 1917. The Cycle of Spring, 1917. Personality, 1917. Nationalism, 1917. Lover's Gift and Crossing, 1918. Mashi and other Stories, 1918. Stories from Tagore, 1918. The Parrot's Training, 1918. The Home and the World, 1919. Gitanjali and Fruit-Gathering, 1919. The Fugitive, 1921. The Wreck, 1921. Glimpses of Bengal, 1921. Thought Relics, 1921. Creative Unity, 1922. Greater India, 1923. Gore, 1924. Letters from Abroad, 1923. Red Oleanders, 1924. Talks in China, 1924. Broken Ties. 1924. Red Oleanders, a drama, 1925. Fireflies, 1928. *Address:* Shantiniketan, Bolpur.

TAMBE, SHRIPAD BALWANT, B.A., LL.B., Home Member, Central Provinces, Government. *b.* 8 Dec. 1875. *Educ:* Jabalpur (Hitkarini School), Amraoti, Anglo-Vernacular and High School and Bombay Elphinstone College and Govt. Law School. Pleader at Amraoti, Member and Vice-President of Amraoti Town Municipal Committee: President, Provincial Congress Committee; Member, C. P. Legis. Council 1917-1920 and 1924; President, C. P. Legis. Council, March 1925, *Address:* Nagpur, C. P.

TANNAN, MOHAN LAL, B. Com. (Birm.), Bar.-at-Law, I.E.S., J.P., Principal, Sydenham College of Commerce and Economics, Bombay. *b.* 2 May 1885. *m.* Miss C. Chopra. *Educ.:* at Govt. High School, Gujrat, Forman Christian Coll., Lahore, and the University of Birmingham. Official Liquidator of the Industrial Bank of India, Ltd., in liquidation and the Jt. Official Liquidator, the Indian Army Uniforms Supplying Co., Ltd., in liquidation (both of Ludhiana, Punjab). President, 10th Indian Economic Conference, 1927. Vice-President, the Indian Economic Society, 1921-23; Member of the Finance Sub-Committee of the Indian Merchants' Chamber and Bureau, Bombay (1921-22); Syndic of the Bombay University, 1923-24 to 1927-28; Secretary, Accountancy Diploma Board, Bombay, from 1st March 1923; Director, Bombay Central Co-operative Bank, Ltd., Bombay, 1924; Member Council, Indian Institute of Bankers; Member, Auditors' Council, Bombay; Principal and Prof. of Banking, the Sydenham Coll. of Commerce and Economics, Bombay; Chairman, Ex. Committee of the Seventh Indian Economic Confce. (Bombay). *Publications:* "Banking Law and Practice in India," Indian Currency and Banking Problems" jointly with Prof. K. T. Shah, B.A. (Bom.), B.Sc. (Econ.) London, and several pamphlets such as the "Banking Needs of India," "Indian Currency and the War," etc. *Address:* The Sydenham College of Commerce and Economics, Hornby Road, Bombay.

TATA, SIR DORABJI JAMSETJI, Kt., J.P., senr. partner, Tata Sons, Ld. *b.* 27 Aug. 1859. *s.* of late Jamsetji Nusservanji Tata *m.* 1898, Meherbai, *d.* of H. J. Bhabha. *Educ.:* Caius Coll. (Hon. Fellow), Camb.; Bombay Univ. *Address:* "Esplanade House," Waudby Road, Bombay.

TAW SEIN KO, C.I.E., I.S.O., K.I.H.; Examiner in Chinese, Burma, since 1906. *b.* 7 Dec. 1864. *Educ.:* Christ's Coll., Camb.; Burmese and Pali Lecturer, Rangoon Coll., 1882-85; Asst. Sec. to Govt. of Burma, 1889-01; Burmese Lecturer, Cambridge, 1892-93; Supdt., Archæological Survey, Burma Circle, 1899-1919. *Publications:* Burmese Sketches, Vols. I and II; Selections from the Records of the Hluttaw; Translation of Maha Janaka Jataka; Elementary Handbook of the Burmese Language. *Address:* Peking Lodge, Mandalay; Underwood, Maymyo.

TEGART, SIR CHARLES AUGUSTUS, KT. C.I.E., M.V.O.; Commissioner of Police, Calcutta. *b.* 1881. *Educ.:* Portora Royal Sch., Enniskillen; Trinity Coll., Dublin. Joined Indian Police, officiated as Dy. Insp.-Gen. of Police, Calcutta 1901. *Address:* Calcutta.

TEHRI, CAPTAIN H. H. RAJA NARENDRA SHAH SAHEB BAHADUR, C.S.I., of Tehri-Garhwal State. *b.* 3 Aug. 1898. *m.* 1916. Heir-apparent born 1921. Succeeded 1913. *Educ.:* Mayo Coll., Ajmer. *Address:* Tehri, Garhwal State.

THAKORRAM KAPILRAM, DIWAN BAHADUR, B.A., LL.B., C.I.E., Vakil, High Court and Dist. Govt. Pleader and Public Prosecutor. *b.* 16 April 1868. *m.* Ratangavri, *d.* of Keshavrai Amritrai. *Educ:* at Bhavnagar, Alfred High School and Elphinstone College, Bombay. Apptd. teacher in Govt. Sorabji J. J. High School of Surat and began pratice at Surat in 1894. Entered Municipality in 1904; became Chairman, Schools Committee 1907-1909 and 1911 and Chairman, Managing Committee in 1908 and 1917-18. Vice-President of the Municipality in 1911 to 1914 and President in 1914-17; and again in 1928 for the triennium 1928-31. Appointed Chairman, Committee of management in 1922-25; Chairman of School Board in 1925. Appointed a member of the Pratt Committee; and witness before the Royal Reforms Commission, 1918. Vice-President, Surat Sarvajanik Education Society 1927-28. *Address:* Athwa Lines, Surat.

THAKUR, RAO BAHADUR KASHINATH KESHAV, I.S.O.; Sen. Div. and Sess. Judge, Nagpur

since 1911; *b.* 15 Feb. 1860. *Educ.:* Saugor and Jubbulpore H. S.; Muir Central Coll., Allahabad. *Address:* Nagpur.

THESIGER, VICE-ADMIRAL BERTRAM SACKVILLE, C. B. (1916), C. M. G. (1911); Commander-in-Chief, East Indies Squadron. *b.* 14 Jan. 1875. *m.* 1921, Violet, widow of W. Brodrick Cloete, and *d.* of late J. A. Henley. Entered Royal Navy, 1887; Lieut., 1895; Commander, 1905; Captain, 1912; Rear-Admiral, 1922; served European War, Battle of Jutland Bank, 1914-18 (despatches C. B.); A. D. C. to the King, 1922; 2nd Class Order of St. Anne of Russia with cross swords; St. Vladmir, Russia, with crossed swords. *Publications*: Queries in Seamanship. *Address*: H. M. S. Effingham.

THOMAS, GEORGE ARTHUR, B.A., C.I.E. (1925), Collector of Bombay *b.* 4 May 1877. *m.* Gwenllian Dorothy, *d.* of Dean Howell. *Educ.:* Clifton College and Emmanuel Coll., Cambridge; 1st Class Classical Tripos; Joined I.C.S. in 1900; Asstt. Collr., Belgaum, Bijapur and Dharwar; Asstt. Collr., Customs, Bombay; Collr. of Customs, Madras; Collr. of Kolaba and Hyderabad, Sind; Secretary, Revenue Department, General Department and again Rev. Department and Chief Secretary; Member, Council of State 1927; Ag. Commissioner in Sind (1928). *Address:* Bombay.

THOMPSON, SIR JOHN PERRONET, K.C.I.E. (1926), C.S.I. (1919); Chief Commissioner of Delhi, 1928. *b.* 8 March 1873. *m.* Ada Lucia, *d.* of the late R. Y. Tyrrell, Litt. D. Senr., Fellow, Trinity Coll., Dublin. *Educ.:* Leeds Gr. Sch. and Trin Coll., Cambridge; 1st Class Classical Tripos; President of the Union (1895): Entered I.C.S., 1897; Ch. Sec. 1916. Member of Indian Leg.-Council, 1918-19; Member of Reforms Committee, 1918-19; President, Railway Police Committee, 1921; Political Secretary, Foreign and Political Department 1922-28 Member of Council of State 1922-27; Chief Commissioner of Delhi, 1928, formerly President, Punjab Historical Society and Fellow and Syndic of the Punjab University. *Address*: Delhi.

THORNTON, HUGH AYLMER, C.I.E., B.A., I.C.S.; Commissioner. *Educ.:* Cheltenham Christ Church, Oxford (B.A.). Ent. I.C.S. 1895. *Address:* Sagaing, Upper Burma.

THULRAI, TALUQDAR OF, RANA SIR SHEORAJ SINGH BAHADUR OF KHAJURGAON, K.C.I.E., Rai Bareli District. *b.* 1865. *m.* 1st *d.* of Babu Amarjit Singh, *y. b.* of the Raja of Majhouli; 2nd, *d.* of Raja Somesurdatt Singh; a Raja of Kundwar; 3rd *d.* of the Raja of Bijapur District. *Educ.:* Govt. H. S., Rai Bareli. *S.* father, 1897; descended from King Salivahan, whose Sumvat Era is current in India. *Heir:* Kunwar Lal Elma Natt Singh Bahadur. *Address:* Thulrai, Khajurgaon.

TODHUNTER, SIR CHARLES GEORGE, K.C.S.I. (1921), Fellow of the Royal Statistical and Royal Historical Societies; *b.* 16 Feb. 1869. *Educ.:* Aldenham Sch. and King's Coll., Cambridge, Members' prizeman, Cambridge University, 1888; *m.* Alice, O.B.E., K.-i-H., *d.* of Captain C. Losack, 93rd Highlanders. Served in I.C.S., Madras; also conducted special inquiries into Customs and Excise matters in Kashmir, the C.P. and C.I. States. Sec., Indian Excise Committee, 1906; I.G. of Excise and Salt to the Govt. of India, 1909-1920. President, Life Saving Appliances Committee, 1913; Secretary to Govt. of Madras, 1915; Member of Board of Revenue, 1916; Member of Executive Council, 1919-24. President, Indian Taxation Enquiry Committee, 1924-25; Member, Council of State, 1926; Private Secretary to H. H. the Maharaja of Mysore. *Address:* Park House, Mysore.

TONK, H. H. AMIN-UD-DAULA WAZIRUL MULK. NAWAB HAFIZ SIR MOHAMMAD IBRAHIM ALI. KHAN BAHADUR SAULAT JANG, G.C.I.E., G.C.S.I. *b.* 1848. *s.* 1867. State has area of 2,553 sq. miles and population of over 287,898. *Address:* Tonk, Rajputana.

TRAVANCORE AND COCHIN, SOUTH INDIA. BISHOP in, RT. REV. E. A. L. MOORE. M.A, *b.* Nov. 13, 1870. *Educ.:* Marlborough Coll., and at Oriel. Coll., Oxford. Curate at Aston, Birmingham, 1894-96; Missionary of the C.M.S. in S. India from November 1896; C.M. S. Divinity School, Madras, 1896-1914; C.M.S. College, Kottayam, 1902-1903; Chairman, C.M.S., District Council, Tinnevelly, 1915-1924 Consecrated Bishop on 24 Feb. 1925. *Address*: Kottayam.

TRAVERS, WALTER LANCELOT, C.I.E. (1925), O.B.E. (1918), M.L.C. Chairman, Dooars Planters' Association, 1914-20; Vice-Chairman, 1921-1924; Member, Bengal Legislative Council 1920 and of Reformed Council 1921-23 and 1924 to date, Leader, British Group; Member, Jalpaiguri District Board, 1914-24. Captain (retd.) North Bengal Mounted Rifles. *Address:* Baradighi Tea Estate, Baradigh. P.O., Jalpaiguri, and Bengal Club, Calcutta.

TRENCH, WILLIAM LAUNCELOT CROSBIE, B.A., I. Inst. C. E. Principal, Engineering College, Poona. *b.* 22 July 1881, *m.* Margaret Zephanie Huddleston. *Educ:* at Leys School and Dublin University. Indian Service of Engineers. *Address:* Engineering College, Poona.

TURNER, ALFRED JOHN, J.P., B.Sc. (London)· 1901; F.I.C., 1905; Principal and Professor of Chemistry, Victoria Jubilee Technical Institute, Matunga. *b.* 1874. *m.* Nita Aspden, *e. d.* John Lyndel Aspden. *Educ.:* Finsbury Technical College and London University. Analyst in various firms and London County Council; Demonstrator and Lecturer at East London College (London Univ.); Science Master at Giggleswick, Yorkshire. *Publications:* Papers to the Berichte, Chemical Society and Monograph on Bitterns. *Address:* King's Circle, Matunga, Bombay.

TURNER, ARTHUR JAMES, M.A. (Cantab.), B. Sc. (Lond.); Director, Indian Central Cotton Committee Technological Laboratory, Matunga, Bombay, since 1924. *b.* 30th September 1889. *Educ:* Wilson's Grammar School, London, S. E., Gouville and Caius College, Cambridge. Assistant in Aeronautical Materials Section, National Physical Laboratory, 1912-15; Head of Experimental Fabrics Laboratory; Royal Aircraft Factory (Establishment), South Farnborough, 1915-1919; Professor of Textile Technology. Manchester University and College of Tech-

nology, Manchester, 1919-1923. *Publications:* Technological Reports on Standard Indian Cottons; many scientific and technical papers on textile subjects presented to the Advisory Committee on Aeronautics, or published in the leading textile journals, or as bulletins of the Indian Central Cotton Committee. *Address:* Cotton Laboratory, Matunga, Bombay.

TURNER, CHARLES WILLIAM ALDIS, B.A., C.I.E. (1928), I.C.S., Secretary to Government, General Dept., Bombay, *b.* July 30, 1879. *m.* Eileen Dorothy Kirkpatrick. *Educ:* King Edward VI. School, Norwich and Magdalen Coll., Oxford. Appointed Asst. Collector, Bombay Presidency in 1903; Settlement Officer, Dharwar Dist. 1909-10; Under-Secretary, Revenue and Finance Departments, Bombay, 1912-15; Cantonment Magte., Ahmednagar, 1917-1919; Collector, Ahmednagar, 1919-21; Personal Asst. to Lord Lee, Chairman, Public Services Commission, 1923-24; Ag. Secretary, Political Department, 1924; and Secretary, General Department, 1924-27, *Address:* Secretariat, Bombay.

TYABJI, HUSAIN BADRUDDIN, M.A. (Honours), LL.M. (Honours), Cantab. 1896; Bar-at-Law, Second Judge Presidency Court of Small Causes, Bombay. *b.* 11 October 1873. *m.* Miss Nazar Mohammad Fatehally. *Educ.:* Anjuman-e-Islam, Bombay; St. Xavier's School and College; Downing College, Cambridge. Practised in the Bombay High Court. *Address:* Almanzil, Walkeshwar Road, Malabar Hill, Bombay.

UDAIPUR, H. H. MAHARAJADHIRAJ MAHARANA SIR FATEH SINGHJI BAHADUR OF, G.C.S.I., G.C.I.E., G.C.V.O., Maharana of Udaipur, Mewar. *b.* 1848. *Address:* Udaipur.

UDAIPUR, H. H. THE RAJA OF, CHANDRASHEKAR PRASAD SINGH DEO, CHIEF OF. *Address:* Udaipur.

ULLAH, REV. ISHAN, Archdeacon of Delhi; Archdeacon in Lahore Diocese from 1910-1915; Canon of the Lahore Cathedral 1915-1922; retired 1924. and Supdtg. Missionary of Toba Tek Singh Mission. *b.* 1857. *Educ.:* Baring H.S., Batala; Lahore Div. Coll. *Address:* C/o Q. Thoan Ullah, M.A., B.T., Lecturer, Multan College, Multan.

UMAR HAYAT KHAN TIWANA, THE HON. COLONEL NAWAB RANA MALIK SIR, K,C.I.E.,C.B.E., M.V.O., Member, Council of State, Landlord. *b.* 1874. *Educ.:* Aitchison Chiefs' College, Lahore, was given Hon. Commission in 18th K.G.O., attended King Edward's Coronation Durbar at Delhi; served in Somaliland; joined Tibet Expedition; was attached to the late Ameer of Afghanistan; attended King George's Coronation Durbar at Delhi; saw active service in the world war in France and Mesopotamia; Mons. Star 1914; Member, Provincial Recruiting Board; represented Punjab, Delhi War Conference in 1918, served in the 3rd Kabul War (mentioned in despatches), made Colonel; Member, Esher Committee 1920; has been President of the National Horse Breeding and Show Society of India. *Address:* Kaira, Dist. Shahpur, Punjab.

VAKIL, SIRDAR SIR RUSTOM JEHANGIR, KT., (1924); Khan Bahadur (1907); First Class Sirdar of Gujarat (1911); Millowner and Merchant. *b.* Sept. 1878. *m.* Tehmina, *e. d.* of Dr. D. E. Kothawala, Civil Surgeon, retd., Bombay Medical Service. *Educ:* Gujarat College, Ahmedabad. Since 1901 Managing Partner in Nowroji Pestonji & Co., Govt. Salt Agents; Pioneer of Magnesium Chloride industry in India; Presdt., Dist. Local Board; for many years member of Ahmedabad Municipality; Dist. Scout Commissioner, late Officer Commanding "D" Coy., 12-2 Bombay Pioneers; and Divisional Supdt., St. John Ambulance Brigade, Ahmedabad Division; was member of Imperial Legis. Council from 1913-16; has extensively travelled in European countries; Chairman and Director of several industrial concerns and Railway Boards; helped Government during the War in recruitment of combatants and non-combatants and was awarded medal and also certificate by H. E. Lord Willingdon. First Class Magistrate independently in charge of a whole Division since 1911. *Address:* The "Rosery," Shahi Bag, Ahmedabad

VAUX, MAJOR HENERY GEROGE, C.S.I. (1928), C.I.E. (1921), M.V.O. (1922), Military Secretary to the Governor of Bombay. *b.* 1882. *m.* The Baroness Edna von Stockhausen. (American), 1915. *Educ.* St. Lawrence School, Joined the Army 1900; A.D.C. to Governor of Victoria, 1908-11; A.D.C., to Governor of Madras, 1911; A.D.C. to Governor of Bengal, 1912-14; Military Secretary to Lord Carmichael; 1914-17; Mil. Secretary to Earl of Ronaldshay, 1917-22; Mil. Secretary to Earl of Lytton, 1922; Mil. Secretary to Sir George Lloyd, 1922-23; Mil. Secretary to Sir Leslie Wilson, 1923-28; Military Secretary to Sir Frederick Sykes since 1928. *Address:* Government House, Bombay.

VELINKER, SHRIKRISHNA GUNAJI, B.A., LL.B. (Bombay), J.P. (1903); Holder of Certificate of Honour, Council of Legal Education, Trinity (1909); of the Honourable Society of Lincoln's Inn; Bar-at-Law, Trinity, (1909). *b.* 12 April, 1868. *m.* to Prabhavatibai, *d.* of Rao Bahadur Makund Ramchander, Executive Engr., Bombay. *Educ.:* St. Xavier's College, Bombay. Enrolled as pleader, High Court, Bombay, in 1893; called to the Bar in July 1909. In prominent practice in the High Court at Bombay and criminal courts of the Presidency. One of the Commissioner appointed under the Defence of India Act to try culprits in Ahmedabad and Viramgam arson and murder cases, 1919; President, Tribunal of Appeal under City of Bombay Improvement Act, Sept. 1922 to April 1923; Secry., P. J. Hindu Gymkhana, 1897-1903. *Publications:* Law of Gaming and Wagering and the Law of Compulsory Land Acquisition and Compensation. *Address:* Ratan House, 1-4 Lamington Road (South), Bombay.

VENKATASUBBA RAO, THE HON. MR, JUSTICE M., B.A., B.L., Judge, High Court, Madras. *b.* 18 July 1878. *Educ.:* Free Church Mission Institution, Madras Christian College and Madras Law College. Was enrolled High Court Vakil in 1903; Practised from 1903-1921 in partnership with Mr.

V. Radhakrishnaiya under the firm name of Messrs. Venkatasubba Rao and Radhakrishnaiya. Had a large and leading practice on the Original Side of the High Court. Election Commissioner, 1921-22; apptd. to the High Court Bench, 17 Nov. 1921; President, Anandana Samajam, Depressed Classes Mission Society and Madras Dist. Scout Council; Vice-President, Provincial Scout Council. *Address:* "Pevensey." Nungambaukum, Cathedral P. O., Madras.

VENKATASWETA CHALAPATI RUNGA, RAO BAHADUR, MAHARAJAH SIR RAVU, MAHARAJAH OF BOBBILI, G.C.I.E., C.B.E., Maharajah, 1900; Ancient Zamindar of Bobbili. *b.* 28 Aug. 1862. *Educ.:* Bobbili, privately. Ascended Gadi in 1881; Life Mem., Royal Asiatic Soc.; Mem. of Madras Council, 1896, 1898, 1900, and 1902; First Native Mem. of Madras Exec. Council, 1910-11. *Publications:* Advice to the Indian Aristocracy, Hindu Religion, Diaries in Europe. Criticism on the *Ramayana* and the *Mahabharata. Address:* Bobbili, Madras Presidency.

VERNON, HAROLD ANSELM BELLAMY, First Member, Board of Revenue, Madras and Member, Council of State. *b.* 12th September, 1874. *m.* to Rhona Warren Slade. *Educ.:* at Clifton College and at Oxford. Secretary to Board of Revenue, Excise; Secretary, R. I. M. Commission. Private Secretary to Sir A. Lawley. M.L.A. 1926; Agent to G. G., Madras States, Trivandrum. *Publications:* Notes on Italian Salt (a translation). *Address:* Adyar, Madras.

VERRIERES, ALBERT CLAUDE, C.I.E.; Joint Chief Engineer (1920), P.W.D. *m.* 1899, Mabel Blanche, *d.* of the late Francis Moore. *Educ.:* St. Peter's Coll. Agra; Thomason Civil Engineering Coll., Roorkee. Ent. P. W. D., 1893, Under-Secy. to Govt., P. W. D., Naini Tal, 1911-14; Exe. Eng., Dehra Dun, 1915-16; Supdtg. Eng., 1916-18; Sanitary Eng., 1918-19; Offg. Chief Engineer, United Provinces, 1920-21. *Address:* "Dar-ul-Shafa", Lucknow.

VIEIRA DE CASTRO, RT. REV. THEOTONIUS MANOEL RIBEIRO, D.D., D.C.L.; R. C. Bishop of San Thomé de Mylapore, since 1899. *b.* Oporto, 1859, *Educ.:* Gregorian Uni., Rome. *Address.:* Tomar, Portugal.

VIJAYARAGHAVA CHARYA, DIWAN BAHADUR SIR, M.B.E. (1919): Member, Public Service Commission from 1926. *b.* August 1875. *Educ.:* Presidency College, Madras. Joined Provincial service, 1898; Revenue Officer, Madras Corpn., 1912-17; Secretary to Board of Revenue, 1917-18; Dewan of Cochin, 1919-22, Collector and Magistrate, 1920; Commissioner for India, British Empire Exhibition, 1922-25;. *Address:* Simla.

VIRA VALA, DURBAR SHRI, *b.* 31 Jan. 1888. *Educ.:* at Rajkumar College, Rajkot. Wing Master, Rajkumar College, Adviser to the Thakore Saheb, Chuda; Deputy Political Agent, Palanpur; Manager, Lathi State, Dewan, Porbandar State, Dewan, Junagadh State. District Deputy Political Agent, Rewa Kantha up to 1st April 1927. *Address:* Bagasra, Kathiawar.

VISHNU DIGAMBER PALUSKAR, PANDIT, GAYANACHARYA, *b.* 1872. *m.* Mrs. Ramabai Paluskar. *Educ.:* Miraj State. *Publications:* 54 Music books of notations. *Address:* Shri Ram Nam Adhar Ashram, Panchavati, Nasik.

VISVESVARAYA, SIR MOKSHAGUNDUM, K.C.I.E., D.Sc., M.I.C.E., late Dewan of Mysore. *b.* 15 Sept. 1861. *Educ.:* Central Coll., Bangalore, and Coll. of Science, Poona. Asst. Engineer, P.W.D., Bombay, 1884; Supdt. Eng., 1904; retired 1908. Apptd. Sp. Consulting Eng. to Nizam's Govt., 1909; Ch. Eng. and Sec.. P.W. and Ry. Depts., Govt. of Mysore, 1909; Dewan of Mysore, 1912-1918. Chairman, Bombay Technical and Industrial Education Committee (appointed by the Government of Bombay) 1921-22: Member, New Capital Enquiry Committee, Delhi, 1922; Retrenchment Adviser to the Bombay Municipal Corporation, 1924. Chairman, Indian Economic Enquiry Committee (appointed by the Government of India) 1925; Member, Bombay Back Bay Inquiry Committee (appointed by the Government of India) 1926. Toured round the world in 1919-20 and has also otherwise travelled extensively. *Publication:* "Reconstructing India" (P. S. King & Son, Ltd., London). *Address:* Uplands, High Ground, Bangalore.

VOLKERS, ROBERT CHARLES FRANCIS, C.I.E., Sec., Railway Board 1907-13; Accountant, P. W. D., since 1878; Examiner, 1894. *Address:* Calcutta.

WACHA, SIR DINSHA EDULJI, KT., J.P., a Governor of the Imperial Bank of India (1920); Member, Bombay Leg. Council (1915-16): and of Imperial Leg. Council, 1916-20. Member, Council of State (1920); Member of the firm of Messrs. Morarji Goculdas & Co. Agents, Morarji Gokuldas S. & W. Co., Ltd. and Sholapur S. & W. Co., Ltd.; Director, The Central Bank of India and the Scindia Navigation Company. *b.* 2 Aug. 1844. *m.* 1860, but widower since August 1888. *Educ.:* Elphinstone Coll., Bombay; in Cotton Industry, since 1874; for 30 years Bombay Mun. Corpn. (President, 1901-02); for 39 years, Mem., Bombay Millowners' Association Committee since 1889 and President in 1917 and Member, Bombay Imp. Trust since its formation in 1898 up to 1919; Pres. of 17th National Congress, Calcutta, 1901; and of Belgaum Prov. Conference, 1894; gave evidence before Royal Commission on Indian expenditure in 1897; Trustee of Elphinstone Coll.; also Chairman, Indian Merchants' Chamber and Bureau; was Gen. Sec., Indian National Congress for 18 years from 1894; Trustee of Vic. Jubilee Technical Institute since 1902 and Hon. Sec. from 1909 to 1923 President, Western India Liberal Association since 1919. Was Secretary, Bombay Presidency Association from 1885 to 1915 and President from 1915 to 1918. Was President of the First Bombay Provincial Liberal Conference in 1922; is Chairman and Trustee of People's Free Reading Room and Library since 1917. *Publications* Pamphlets on Indian Finance, Currency and Economics, Agricultural Condition of

India, Railways, Currency, Temperance, Military Expenditure, etc.; large contributor to leading Indian newspapers and journals for more than 45 years; also had published History of Share Speculation, 1863-64; Life of Premchand Roychand; Life of J. N. tata; the Rise and Growth of the Bombay Municipal Government, four papers on Indian Commerce and Statistics and My Recollections of Bombay (1860-75). *Address*: Jiji House, Ravelin Street, Fort, Bombay.

WADIA, BOMANJI JAMSETJI, M.A., LL.B. (Univ. of Bombay), Bar-at-Law. *b.* 4 Aug. 1881. *m.* Rattanbai Hormusji Wadia and subsequently to Perin Nowroji Chinoy of Secunderabad. *Educ.*: St. Xavier's College, Bombay, and at the Inner Temple, London. for the Bar, 1904-6, was Principal, Govt. Law College, Bombay, 1919-1925. Acting Puisne Judge of the High Court of Bombay for two months from 5th June 1928. *Address*: Quetta Terrace, Chowpatty, Bombay.

WADIA, C. N., C.I.E. (1919); Millowner. *b.* 1869. *Educ.*: King's Coll., London. Joined his father's firm, 1888. Chairman, Bombay Millowners' Association (1918). *Address*: Pedder House, Cumballa Hill, Bombay.

WADIA, JAMSETJI ARDASEER, J.P., 1900 Merchant. *b.* 31 Oct. 1857. *Educ.*: Elphinstone Sch. and Coll. and served apprenticeship in Dickinson Akroid & Co. of London: Promotor and Director of Cotton and other industrial concerns; Member of Bombay Mun. Corpn., from 1901-1921. *Publications*: Writer on Industrial and Economic subjects: published two pamphlets against closing of the Mints. *Address*: Wilderness Road, Malabar Hill, Bombay.

WADIA, SIR NUSSERWANJEE NOWROSJEE, K.B.E., C.I.E., M.I.M.E., J.P., Millowner. *b.* 30 May 1873. *m.* Evylene Clara Powell. *Educ.*: St. Xavier's College. Chairman of the Bombay Millowners' Association, 1911 and 1925. *Address*: Strachey House, Pedder Road, Bombay.

WADIA, PESTONJI ARDESHER, M. A., Professor of Philosophy and History, Wilson College, Bombay. *b.* 16 Dec. 1878. *Educ.*: Elphinstone College, Bombay. *Publications*: The Philosophers and the French Revolution: Zoroastrianism and our Spiritual Heritage; Inquiry into the Principles of Theosophy; The Wealth of India; Money and the Money Market in India, An Introduction to Ivanhoe and History of India. *Address*: Hormazd Villa, Malabar Hill, Bombay.

WALI MAHOMED HUSSANALLY, KHAN BAHADUR, B.A., LL.B., son of the late Hon'ble Khan Bahadur Hussanally Bey Effendi, Turkish Consul and Founder of the Sind Madressah-tul-Islam, Karachi; was Member, Legislative Assembly; Retired Dpty. Collector and Special First Class Magistrate and Landed Proprietor; is General Secretary, Sind Mahomedan Association and Chairman, District School Board, Karachi. *b.* 5 Dec. 1860. Widower. *Educ.*: Elphinstone College and Govt. Law School, Bombay. Served Govt. in various departments for 33 years: retired in 1915. *Address*: Devon Vella, McNiel Road, Frere Town, Karachi.

WALKER, GEORGE LOUIS, Solicitor and Notary Public; Partner, Messrs. Little and Co., Registrar of the Diocese of Bombay. *b.* 25 September, 1879. *m.* to Agnes Muriel Porter, *d.* of Col. R. S. Porter, Dy. Lieutenant of County of Lancaster. *Educ.*: Liverpool College. War Service, France and Belgium, 4th Aug. 1914 to November 1919: promoted Lieut.-Col. R.F.A. Retired, 1921. *Address*: Byculla Club.

WALLACE, THE HON. MR. JUSTICE EDWARD HAMILTON, M.A. (Glas.), B.A. (Oxon.), Judge, High Court, Madras. *b.* 13 May 1873 *m.* Anna Richmond Miller Loudon. *Educ.*: High School, Glasgow; Glasgow Univ.; Balliol. Coll., Oxford. Passed I.C.S., 1895. Served in Madras Presidency since 1896; Judge of Chief Court, Mysore State, 1912-14. *Address*: Cathedral Gardens, Madras.

WALMSLEY, SIR HUGH, KT. (1923), M.A. Judge, Calcutta High Court since 1915; I.C.S. *Educ.*: Merton Coll., Oxford. Ent. I.C.S., 1893. *Address*: High Court, Calcutta.

WALWYN, REAR-ADMIRAL HUMPHREY THOMAS, Director, Royal Indian Marine, Bombay. *b.* 25th January 1879, 2nd *s.* of the late Col. J. Walwyn, Crofty Bwla, Monmouth. *m.* 1912 Eileen Mary van Straubenzee; one *s.* *Educ.*: H. M. S. Britannia, Dartmouth. Went to sea in H. M. S. Camperdown, January 1895; qualified as Gunnery Lieut. 1904 and obtained the Egerton Memorial Prize; Gunnery Lieut. of H. M. S. Drake under Prince Louis, H.M.S. Superb, Neptune; Commander, 1912; H. M. S. Warspite, 1915-17 (D.S.O.), Capt. 1916; in command destroyer flotillas and Senior Officer Mediterranean Destroyers, 1923; Director of Gunnery Division, Naval Staff, Admiralty, 1924-26; Naval A.D.C. to the King, 1927; Director, Royal Indian Marine, Bombay, 1928. *Address*: Royal Indian Marine Dockyard, Bombay.

WANKANER, CAPTAIN HIS HIGHNESS MAHARANA SHRI SIR AMARSINHJI, RAJ SAHEB OF, K.C.I.E. *b.* 4 Jan. 1879; *s.* 1881. *Educ.*: Rajkumar Coll. State has area of 425 sq. miles, and population of 36,824. Salute, 11 guns. *Address*: Wankaner, Kathiawar.

WARD, COLONEL HENRY CHARLES SWINBURNE, C.I.E. (1920), O.B.E. (1919) and Serbian Order of White Eagle (1917); *b.* 12 June 1879. *Educ.*: Winchester and Sandhurst, 1st Commission; 1918; Joined 2nd Bengal Lancers, 1901; Staff College, 1911-12; War 1913-1917; various staff appointments; Afghan operations, 1919; G.S.O. I 2nd Division; commanded 2nd Lancers, 1921-22; A.A.G., Army Headquarters, 1922-23. Director Pay and Pensions, A.H.Q., 1923-25; A. A. and Q. M.G. C.P., District, 1925-26; A.Q.M.G., Southern Command H.Q. 1926-27; retired on 1st April 1927; apptd. Chief of Staff, Bhopal, 1st April 1927; Army Member, Bhopal State Council, 1st May 1928. *Address*: Bhopal, C.I.

WARNE, RT. REV. FRANCIS WESLEY, Bishop of the Methodist Episcopal Church since 1900. *b.* 30 Dec. 1854. *Publications*: The Sinless, Incarnation; A Tribute to the Triumphant; The Lord's Supper; A Covenant-Keeping God; The Biblical Sabbath; and "The Story of Lizzie Johnson. *Address*: Bangalore.

WATHEN, FREDERICK BLUNT, M.B.E., V. D. Member of the Institute of Transport; Member, Legislative Council: Agent to M. & S. M. Railway, 1928; *b.* June 12, 1877. *m.* Dec. 16, 1918, Louisa Walker. *Educ.*: St. Paul's School, London. Joined Eastern Bengal Railway, 22nd August 1898; Madras Railway, 1902, as Asstt. Traffic Manager; afterwards Secretary to Agent, subsequently appointed Deputy Traffic Manager. After amalgamation of Southern Mahratta and Madras Railways in 1908, appointed District Traffic Superintendent of the Amalgamated system (Madras and Southern Mahratta Railway); acted Secretary to Indian Railway Conference Association 1911; Dy' Traffic Manager, M. & S. M. Railway; General Traffic Manager, M. & S. M. Railway 1916; Chairman, Traffic Committee, Indian Railway Conference Association, November 1921 to March 1923; appointed by the Government of Madras to act as Chairman of Madras Port Trust, 1928; Hon. Colonel and Commandant of the M. & S. M. Railway Rifles, Auxiliary Force, India. *Address*: "Rostrevor," Teynampet. Madras.

WATSON, ALFRED HENRY, Editor, *Statesman*. Calcutta. *b.* 1874. *m.* Isabella Morland Beck, *Educ*: Rutherford College, London. Editor, *Newcastle Leader* 1895-1902, News Editor, *Westminster Gazette*, 1903-8, Manager, 1909-1921, Managing Editor, 1921. Editor, the *Statesman*, 1925. *Publications*: Papers on Tariff Questions and the Meat Trust. *Address*: 9, Roy Mansions, Calcutta.

WATSON, CHARLES CUNINGHAM, C.S.I. (1928); C.I.E., 1913. Secretary, Foreign and Political Dept., Government of India; *b.* 1874. *m.* 1912 Phyllis Marion, *d.* of A. Field, Hove, Sussex. *Educ.* Edinburgh Univ; Christ Church, Oxford. Entered I.C.S., 1897; Asstt. Collr., Poona, 1898-1901; Political Agent in Kathiawar, 1901-3; First Asstt. to the Agent to the Governor-General in Rajputana, 1904-8; Private Secretary to H. E. the Governor of Bombay, 1909-12; Secretary, the Government of Bombay, Political and Judicial Departments, 1912-14; Commissioner, Ajmer, 1915-16; Deputy Secretary, Government of India Political Department, 1916-17; Political Agent, Eastern Rajputana States, 1917-21; Political A.D.C. to Secretary of State for India, 1921; Ag. Agent to the Governor-General in Rajputana, 1923; Ag. Resident, Mysore, 1924; A. G. G. in Western India States, 1924-28. *Address*: The Residency, Rajkot.

WATSON, HERBERT EDMESTON, D.Sc. (Lond.) F.I.C., M.I. Chem. E. Fellow of University Coll., London, Professor of General Chemistry Indian Institute of Science. *b.* 1886. *m.* 1917 Miss M. K. Rowson. *Educ.*: Marlborough Coll., London, Berlin, Geneva and Cambridge Universities. Asstt. Prof., Indian Institute of Science, 1911, apptd. Prof. of General Chemistry in 1916. *Publications*: Numerous papers on physical chemistry and allied subjects. *Address*: Indian Institute of Science, Hebbal, Bangalore.

WEBB, CHARLES MORGAN, M.A. (Cambridge), C.I.E. (1921); Chairman, Rangoon Development Trust. *b.* 30th June 1872. *m.* to Lilian Elizabeth Griffiths. *Educ.*: Masons College, Birmingham, St. John's, Cambridge. Entered I.C.S., 1894; Deputy Commissioner, 1901; Settlement Officer, 1903; Supdt., Census Operations, Burma, 1909; Secry., Govt. of Burma, 1914; Chief Secry., Govt. of Burma, 1918; First Vice-Chancellor, Rangoon University, 1920, Chairman, Rangoon Development Trust, 1921. *Publications*: Census Reports, Burma, 1911. *Address*: Lorretto Villa, Prome Road, Rangoon.

WEBSTER, JOHN EDWARD, C.S.I., C.I.E., I.C.S., Commsr., Surma Valley, Assam, since 1912. *b.* Ranchi, 3 Sept. 1871. *Educ.*: Charterhouse; Trinity Hall, Cam. Ent. I.C.S., 1891. *Address*: Silchar.

WEIR, MAJOR-GENERAL G.A., C.B., C.M.G., D.S.O., General Officer Commanding Bombay District. *b.* 1st Dec. 1876. *m.* 1917, Margaret Irene, *d.* of Robert More, Woodsgate Place. Bexhill. *Educ*: Harrow: Trinity College, Cambridge; Capt. (1902), Major (1912); served South Africa, 1899-1901 (despatches twice); Queen's Medal 4 Clasps; European War 1914-18 (wounded), despatches D. S. O., Bt. Lt.-Col. and Col. Officer of St. Maurice and St. Lazarus: Croix de Guerre avec palmes; Commandant, Equitation School and Inspector of Cavalry, 1922-26. *Address*: Bombay District Headquarters, Assaye Building, Colaba.

WESTCOTT, Rt. REV. F., *see* Calcutta, Bishop of.

WHEELER, THE VENERABLE HUGH TREVOR. M.A. (Dublin), Archdeacon of Lahore, 1919. *b.* 27 September 1874. *m.* Kathleen Gunning. *Educ.*: Trinity College. Dublin. Chaplain to the Forces, M.E.F., 1915. *Address*: The Parsonage, Lahore.

WHITE, MAJOR FREDERICK NORMAN, C.I.E., M.D.; Asst. Dir.-Gen., I.M.S. (Sanitary), 1914; Sanitary Commsr., Govt. of India, Simla. *Address*: c/o Grindlay, & Co., Bombay,

WHITTY, JOHN TARLTON, C.I.E.; Commissioner, Muzaffarpur. *Educ*: Clifton Coll.: New Coll., Oxford; Univ. Coll., London. Ent. I.C.S., 1898. *Address*: Muzaffarpur.

WHITWORTH, CHARLES STANLEY, C.I.E. (1927); Chief Mining Engineer to the Govt. of India (Railway Dept.). *b.* 14 June 1880, Attached to Mining Dept., North-Western Railway, 1909-12; Asst. Coal Supdt., Indian State Railways, 1913-14; lent to G.I.P. Rly., 1914-17; Officiated as Mining Engineer and Technical Adviser to Coal Controller, 1918-20; Apptd. Chief Mining Engineer, Railway Board 1921; Member, Indian Coal Committee, 1925; Presdt., Indian Coal Grading Board, 1927-28. *Address*: Bengal Club, Calcutta

WILKINSON, HECTOR RUSSELL, B.A., C.I.E. (1927); I.C.S., Magistrate-Collector, Chittagong. *b.* March 11, 1888. *m.* Theodora Daintree. *Educ.:* Clifton and Queen's College, Oxford. Entered Indian Civil Service in 1912 and posted to Bengal. Private Secretary to H. E. the Governor of Bengal, 1922-27. *Address:* Chittagong, Bengal.

WILLIAMS, GEORGE BRANSBY, M. INST. C. E., M.I. MECH. E., F.R. SAN. I., F.R.G.S., M.I.E. (Ind.), late Chief Engineer, Public Health Department, Bengal; Consulting Engineer. *b.* 7 April 1872; *m.* Dorothy Maud, *d.* of E. Thorp of Cheadle Hulme, Cheshire. *Educ.:* Clifton Coll. Articled to Mr. James Mansergh, F.R.S., P. Pres. Inst. C.E., 1891; Asst. on York Main Drainage Works, Birmingham Waterworks; Resident Engineer-in-Charge, Whitby Waterworks; Served S. Africa, 1900-01, Railway Staff Officer; Asst. District Engineer, Imperial Military Railways; Pers. Asstt. to Mr. G. R. Strachan, M. Inst. C.E., 1902-06, Croydon Waterworks, Shrewsbury Waterworks; Consulting Engineer to Colonial Office, 1906-08; Nairobi Drainage and Water works. Naivasha, Nakuru and Zanzibar sanitation; designed Sketty Sewerage Works, &c., Sanitary Engineer, Bengal (1909); designed nearly 200 schemes of water supply, drainage and sewerage of which about 80 have been carried out including Jheria, Gaya, Hooghly, Chinsurah, Kalimpong, Serampore, Monghyr, Comilla, Raneegunge, Midnapore, Suri and Cooch-Behar waterworks, Gaya. Burdwan, Dacca, Kurseong and Tittaghur main drainage schemes. *Publications:* Sewage disposal in India and the East; Elementary Sanitary Engineering (three editions); Practical Sanitary Engineering; Modern Sewage Disposal, R. E. Journal, 1909, "Rainfall of Wales," Geographical Journal, 1909; Flood discharge and Spillways in India, "Engineer," 1922; Recent Progress in Sanitary Engineering in Bengal Public Health in India "XIXTth Century" February 1928 &c., *Address:* 28 Victoria Street, Westminister S. W. 30 Hill Street, S. W. and and United Service Club, Calcutta.

WILLIAMS, CAPT. HERBERT ARMSTRONG, D.S.O., I.M.S.; Resident Medical Officer, Rangoon General Hospital, since 1907. *b.* 11 Feb. 1875. *Address:* General Hospital, Rangoon.

WILLIS, MAJOR-GENERAL EDWARD HENRY, C.B. (1918), C.M.G. (1917); Technical Adviser. R.A., India. *b.* 5th Sept. 1870. *Educ.:* at Bath. Commissioned Royal Military Academy, 1890; Commanded 94th Battery, R.F.A. (Lahore Division), 1914; Commanded 78th Brigade R.F.A. (17th Division). 1915; C.R.A. 12th Division, 1916-17; 17th Corps, 1917-18. *Address:* Army Headquarters, Simla.

WILLIS, SIR GEORGE HENRY, KT. (1928) C.I.E. 1918 M.V.O. (4th) 1911, Lt.-Col., R.E., M.I Mech. E., M.I.E., (Ind.) Master Security Printing India. *b.* 21 Oct. 1875; *Educ.:* St. Paul's Sch., London: R. M. A., Woolwich, R. E., 1895; Major, 1914, Lt. Col. 1921. Arrived India, 1900: Deputy Mint Master, 1907; Master of the Mint. October 1915 to February 1926. Past President of Council Institution of Engineers (Ind.), *m.* 1900, 3, daughters. *Address:* Security Printing India, Nasik Road.

WILSON-JOHNSTON, JOSEPH, B.A., C.I.E. (1926), Kaiser-i-Hind Gold Medal (1911), C.B. E. (1918), I.C.S., Administrator, Nabha. *b.* 12 June 1876. *m.* Helen J. M. Campbell. *Educ.* Rugby and Balliol College, Oxford. *Address:* Nabha, Punjab.

WINTERBOTHAM, GEOFFREY LEONARD, B.A. (Cantab.). Merchant, Partner, Messrs. Wallace & Co., *b.* 7 Oct. 1889. *m.* Hilda, youngest *d* of D. Norton, C.S.I. *Educ.:* Malvern Coll. and Magdalene Coll., Cambridge. Business in India since 1912; apptd. Consul for Siam at Bombay, 1926; Member, Legislative Council, Bombay, 1926-27; Vice-President, Bombay Chamber of Commerce, 1927. President, Bombay Chamber of Commerce, 1929. *Address:* Sakina Mansion, Carmichael Road, Cumballa Hill, Bombay.

WOOD, SIR JOHN BARRY, K.C.I.E., K.C.V.O., C.S.I., Resident in Kashmir, *b.* 1870. *m.* 1896, Ada Elizabeth, *d.* of G.A. Stack, I.E.S. *Educ.* Marlborough; Balliol Coll., Oxford. Ent. I.C.S., 1894. Under-Sec. to Govt. of India, Foreign Dept., 1899-1903; 1st Assist. in Baluchistan, 1903; Dy. Sec., Foreign Dept., 1906-10; Resident, Indore, 1912; Pol. Sec., Government of India, 1914-22. *Address:* Srinagar, Kashmir.

YAIN, THE HON. LEE AH. K.i.H. Bar-at-Law, M. L.C. Ex--President, Rangoon Corporation, Fellow of Rangoon University, Minister of, Forests *b.* April 1874, *Educ.:* Rangoon College and Cambridge. *Address:*—Rangoon Secretariat, Rangoon.

YOUNG, GERARD MACKWORTH, M.A., C.I.E., (1929), F.R.G.S., I.C.S., Army Secretary, Government of India. *Educ.:* Eton and King's College, Cambridge. Appointed Asst. Commissioner in the Punjab 1908; Under-Secretary to the Punjab Government, 1913; Under-Secretary, Home Department, Government, of India, 1916-19; Military Department, India Office, 1919-20; Deputy Secretary to the Government of India, Army Department, 1921-24; Offg. Jt. Secretary, Home Department, 1924-26. *Address:* Delhi and Simla.

ZIMMERMANN, THE REV. ROBERT, S.J., PH.D. Professor of Sanskrit and Indian Philosophy St. Xavier's College. *b.* 24 Oct. 1874. Member of the Society of Jesus. *Educ:* Stans and Schwyz (Switzerland), Valkenburg (Holland), St. Beuno's (England), Berlin. Prof. of Sanskrit Literature and Indian Philosophy, St. Xavier's College, Bombay: *Publications:* Die Quellen der Maharnarayan a Upanisad und das Verhaltnis der verschiedenen Rezensionen zu einander (Diss.) Leipzig, 1913. Edr. of A Second Selection of Hymns from the Rigveda, B.S.P.S., LVIII, 2nd ed. Bombay, 1922. Contributions to philological and philosophical journals. *Address:* St. Xavier's Coll., Bombay.

The Calendars.

A full Calendar will be found at the beginning of this book. Below are given details of the other Calendars in use in India.

The *Jewish* Calendar is in accordance with the system arranged A.D. 358. The Calendar dates from the Creation, which is fixed as 3,760 years and 3 months before the beginning of the Christian Era; the year is Luni-solar.

The *Mohammedan*, or era of the Hejira, dates from the day after Mahomet's flight from Mecca, which occurred on the night of July 15, 622 A.D The months are Lunar.

The *Fasli* year was derived from a combination of the Hejira and Samvat years by the order of Akbar; it is Luni-solar. The *Bengali* year seems also to have been related at one time to the Hejira, but the fact of its being Solar made it lose 11 days each year.

The *Samvat* era dates from 57 B.C., and is Luni-solar. The months are divided into two fortnights—*sudi*, or bright, and *badi*, or dark. Each fortnight contains 15 tithis, which furnish the dates of the civil days given in our calendars.

PUBLIC HOLIDAYS IN 1929.

Parsee (Shehenshahi).

Jamshedi Naoroz	March	21
Avan Jashan	April	15
Adar Jashan	May	14
Zarthost-no-Diso	June	15
Gatha Gambhars	September	5 &
Parsi New Year (1st day) ..	,,	7
Khordad Sal	,,	13

Parsee (Kadmi).

Avan Jashan	March	16
Jamshedi Naoroz	,,	21
Zarthost-no-Diso	May	16
Gatha Gambhars	August	6 & 7
New Year	,,	8 & 9
Khordad Sal	,,	14

Mahomedan (Sunni).

Ramzan-Id	March	13
Bakri-Id	May	20
Muharram	June	17
Ashura	,,	18
Mahim Fair (Bombay City only)	December	16

Mahomedan (Shiah).

Shahadat-i-Hazrat Ali ..	March	4
Ramzan-Id	,,	13
Bakri-Id	May	20
Muharram	June	17
Ashura	,,	18
Shahadat-e-Imam Hasan ..	August	5
Id-e-Maulud	,,	23

Hindu.

Makar Shankranti	January	14
Maha Shivratri	March	9
Holi (2nd day)	,,	25
Ramnavami	April	17
Cocoanut Day	August	20
Gokul Ashtami	,,	28
Ganesh Chaturthi and Samvatsari	September	7
Dassera	October	12
Divali	,, / Nov.	31 / 1 & 2

Jewish.

Pesach	April / May	25 / 1
Shabuoth	June	14
Tishabeab	August	15
Rosh Hoshana (1st day) ..	October	5
Kippur (2nd day) ..	,,	14
Sukkoth (1st day) ..	,,	19

Jain.

Chaitra Sud 15	April	23
Shravan Vad 14 to Bhadarva Sud 3 ..	September	2 to 6
Kartik Sud 15	November	16

Christian.

New Year	January	1
Day following New Year ..	,,	2
Good Friday	March	29
Easter	,, / April	30 / 1
Christmas	Dec.	24, 25, 26, 27, 28 & 30
New Year's Eve	,,	31

NOTE.—If any of the Mahomedan holidays notified above do not fall on the day notified, the Mahomedan servants of Government may be granted a sectional holiday on the day on which the holiday is actually observed in addition to a holiday on the day notified.

THE INDIAN CALENDARS.

Mahomedan.

1929.			1347.	
January	1	..	Rajab ..	.. 19
January	13	..	Shaban ..	.. 1
February	12	..	Ramzan ..	.. 1
March	13	..	Shuwal ..	.. 1
April	12	..	Zil-kaideh	.. 1
May	11	..	Til-hijeb ..	.. 1

1929.			1348.	
June	9	..	Mohurrum	.. 1
July	9	..	Safar ..	.. 1
August	7	..	Rubbi-ul-Awwal .	1
September	5	..	Rubbis-us-Sanee .	1
October	5	..	Jamadi-ul-Awall	1
November	4	..	Jamadi-ul-Sanee ..	1
December	3	..	Rajab ..	.. 1
December	31	..	Rajab ..	.. 29

Bengalee.

1929.			1335.	
January	1	..	Pous ..	.. 17
January	14	..	Magh ..	.. 1
February	13	..	Falgoon ..	.. 1
March	15	..	Choitro ..	.. 1

1929.			1336.	
April	14	..	Boysack ..	.. 1
May	15	..	Joistro ..	.. 1
June	15	..	Ashad ..	.. 1
July	17	..	Srabun ..	.. 1
August	17	..	Bhadro ..	.. 1
September	17	..	Assin ..	.. 1
October	18	..	Kartick ..	.. 1
November	17	..	Aughraum	.. 1
December	16	..	Pous ..	.. 1
December	31	..	Pous ..	.. 16

Samvat.

(S=Sudee, B=Budee.)

1929.			1985.	
January	1	..	Magh ..	.. B 6
January	11	..	Pous ..	.. S 1
January	26	..	Pous ..	.. B 1
February	10	..	Magh ..	.. S 1
February	24	..	Magh ..	.. B 1
March	12	..	Fagoon ..	.. S 1
March	26	..	Fagoon ..	.. B 1
April	10	..	Chyt ..	.. S 1

1929.			1985.
April	24	..	Chyt ..
May	10	..	Bysack ..
May	24	..	Bysack ..
June	8	..	Jhyt ..
June	23	..	Jhyt ..
July	7	..	Asar ..
July	22	..	Asar ..
August	6	..	Sawun ..
August	21	..	Sawun ..
September	4	..	Bhadoon
September	19	..	Bhadoon
October	3	..	Assun or Kuar
October	19	..	Assun or Kuar

1929			198
November	2	..	Kartick ..
November	17	..	Kartick ..
December	2	..	Aghan Magsar
December	17	..	Aghan ..
December	31	..	Pous ..

Telegu & Kanarese.

(S=Sudee, B=Budee.)

1929.			1477.
January	1	..	Margasiram
January	11	..	Pushyam
January	26	..	Pushyam
February	10	..	Magham
February	24	..	Magham ..
March	12	..	Palgunam
March	26	..	Palgunam

1929.			1478.
April	10	..	Chitram ..
April	24	..	Chitram ..
May	10	..	Vaishakham
May	24	..	Vaishakham
June	8	..	Jyoshtom
June	23	..	Jyoshtom
July	7	..	Ashadam
July	22	..	Ashadam
August	6	..	Sravanam
August	21	..	Sravanam
September	4	..	Bhadrapadam
September	19	..	Bhadrapadam
October	3	..	Ashwigam
October	19	..	Ashwigam
November	2	..	Kartikam
November	17	..	Kartikam
December	2	..	Margasiram
December	17	..	Margasiram
December	31	..	Pushyam

Tamil-Malayalam.

1929		1104		1929		1105	
January	1	Margoli-Dhanusu.	18				
,,	14	Thai-Makaram ..	1	August	17	Avani-Chingam ..	1
February	12	Marsi-Kumbham	1	September	15	Pooratasi-Kanni	1
March	14	Panguni-Meenum	1	October	16	Aippasi-Thulam .	1
April	13	Chittrai-Mesham .	1	November	15	Kartikai-Brishchikam	1
May	14	Vaikasi-Vrishabham	1	December	14	Margali-Dhanusu.	1
June	15	Ani-Mithunam ..	1	,,	31	Margali-Dhanusu.	17
July	16	Adi-Karkatam ..	1				

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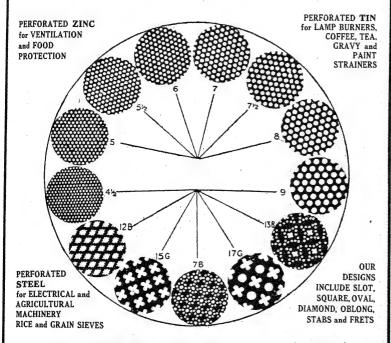
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